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Individual Radiation Protection Monitoring in the Marshall Islands: Enewetak Atoll (2010–2012)

**T.F. Hamilton
S.R. Kehl
R.E. Martinelli
D.P. Hickman
S.J. Tumey
T.A. Brown
R.G. Langston
M.W. Tamblin
K. Johannes
D. Henry**

November 2014

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**T. F. Hamilton, S.R. Kehl, R.E. Martinelli, D.P. Hickman, S. J.
Tumey, T.A. Brown, M.W. Tamblin and R.G. Langston**

Lawrence Livermore National Laboratory
PO Box 808, Livermore, CA 94551
U.S.A.
(hamilton18@llnl.gov)

K. Johannes and D. Henry
Enewetak Radiological Facility
Enewetak Atoll
Republic of the Marshall Islands

As a hard copy supplement to the Marshall Islands Program website (<https://marshallislands.llnl.gov>), this document provides an overview of the individual radiological surveillance monitoring program on Enewetak Atoll along with a full disclosure of all verified measurement data (2010-2012).

November 2014

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INTRODUCTION

The United States Department of Energy has implemented a series of strategic initiatives to address long-term radiological surveillance needs at former U.S. nuclear test sites in the Marshall Islands. The plan is to engage local atoll communities in developing shared levels of responsibility for implementing radiation surveillance monitoring programs for resettled and resettling populations in the northern Marshall Islands. Using the pooled resources of the United States Department of Energy and local atoll governments, individual radiological surveillance programs have been developed in whole-body counting and plutonium urinalysis. These programs are used to accurately track and assess doses delivered to Marshall Islanders from exposure to residual fallout contamination in the environment. The key fallout radionuclides of radiological concern include fission products such as cesium-137 and strontium-90, and long-lived alpha emitting radionuclides such as plutonium-239, plutonium-240 and americium-241.

Permanent whole-body counting facilities have been established at Enewetak, Majuro and Rongelap Atolls. The Enewetak Radiological Facility was constructed in 2001 (Bell *et al.*, 2002) (Fig. 1) and serves the resident population on a permanent basis. All the whole-body counting facilities in the Marshall Islands are operated and maintained by Marshallese technicians with scientists from the Lawrence Livermore National Laboratory providing on-going technical support services. The concentration of cesium-137 in soils from the northern Marshall Islands is significantly elevated over that expected from global fallout deposition. Local inhabitants may be exposed to cesium-137 in their diets from consumption of locally grown foods. Whole-body counting provides a direct measure of internally deposited cesium-137 inside peoples' bodies, and is a very reliable method for assessing the internal dose contribution from ingestion of cesium-137.

We have also developed a state-of-the-art measurement technology in support of the Marshall Islands Plutonium Urinalysis Bioassay Program. Bioassay samples are collected by locally trained technicians under controlled conditions, and returned to the United States for analysis of plutonium isotopes by accelerator mass spectrometry. High-quality bioassay measurements based on accelerator mass spectrometry are providing more reliable and accurate baseline measurements, and could potentially be used to track and reassess intakes of plutonium associated with past events.

Site specific environmental surveys are also conducted to determine the fate and transport of fallout radionuclides in the environment or simply to verify the effects of cleanup programs. The general aim of the on-going environmental studies is to provide understanding of the long-term behavior of key radionuclides in the environment. These data and information will ultimately be used to develop more reliable predictive dose assessments for resettlement taking into account future change in radiological conditions. This information is essential in helping determine the most appropriate measures for cleanup and in assessing the impacts of changes in life-style, diet and land-use on radionuclide uptake and dose.

Together, the individual and environmental radiological surveillance programs in the Marshall Islands are helping meet the informational needs of the United States Department of Energy and the Republic of the Marshall Islands. Our mission is to provide high quality measurement data and reliable dose assessments, and to build a strong technical and scientific foundation to

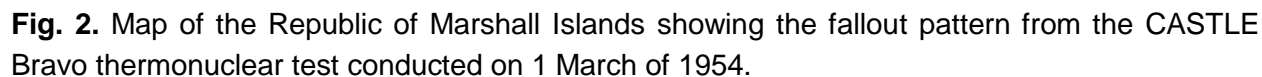
help sustain resettlement of affected atolls. Perhaps most importantly, the recently established individual radiological surveillance programs provide atoll population groups with an unprecedented level of radiation protection monitoring where, for the first time, local resources are being made available to actively monitor resettled and resettling populations on a more permanent basis.

As a hard copy supplement to the Marshall Islands Program website (<https://marshallislands.llnl.gov>), this document provides an overview of the individual radiation protection monitoring program established on Enewetak Atoll along with a full disclosure of all verified measurement data (2010-2012). Users of the website are able to obtain access to individual, de-identified measurement and dosimetric data from the whole-body counting and plutonium urinalysis bioassay programs. In addition, a new interactive website application was also developed during the reporting period to allow users to calculate their own hypothetical ingestion dose (Ingestion Dose Calculator) from cesium-137 based on the consumption of different types of locally grown foods.



Fig. 1. Enewetak Radiological Laboratory.

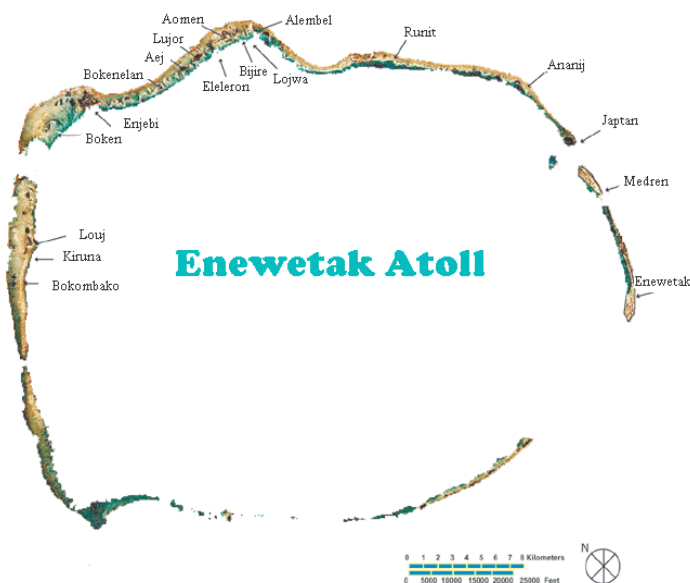
Immediately after WWII, the United States created a Joint Task Force to develop a nuclear weapons testing program. Planners examined a number of possible locations in the Atlantic Ocean, the Caribbean, and the Central Pacific but decided that coral atolls in the Marshall Islands offered the best advantages of stable weather conditions, fewest inhabitants to relocate and isolation with hundreds of kilometers of open-ocean to the west where trade winds were likely to disperse radioactive fallout. During the period between 1945 and 1958, a total of 67 nuclear tests were conducted in the vicinity of Bikini and Enewetak Atolls in the northern Marshall Islands (Fig. 2). The most significant contaminating event was the CASTLE Bravo test conducted on March 1, 1954. Bravo was an experimental thermonuclear device with an estimated explosive yield of 15 Mt (DOE, 2000) that led to widespread fallout contamination over inhabited islands on Rongelap and Utrök Atolls as well as other atolls to the east of Bikini. Today, the United States Department of Energy through the Office of Health and Safety continue to provide environmental monitoring, healthcare and medical services in the Marshall Islands.



Key directives of the Marshall Islands Dose Assessment and Radioecology Program conducted at the Lawrence Livermore National Laboratory are (1) to provide technical support services and oversight in establishing radiological surveillance monitoring programs for resettled and resettling populations in the northern Marshall Islands; (2) to develop comprehensive assessments of current (and assess potential changing) radiological conditions on the islands; and (3) provide recommendations for remediation of contaminated sites and verify the effects of actions taken.

ENEWETAK ATOLL

People and Events on Enewetak Atoll | Post Testing Era and Initial Cleanup Activities



People and Events on Enewetak Atoll

After an initial series of nuclear tests on Bikini Atoll in 1946, local inhabitants of Enewetak Atoll were relocated to a new home on Ujelang Atoll in December 1947 in preparation for scheduling of the first series of nuclear tests on Enewetak. Operation Sandstone commenced during April of 1948 and included 3 tests atop of 60 m high steel towers located separately on the islands of Enjebi, Aomen, and Runit. An additional 4 near-surface tests were conducted on towers as part of Operation Greenhouse during 1951. Operation Ivy, in 1952, set the stage for the first test of a large thermonuclear device. The Mike thermonuclear blast of 31 October of 1952 had an explosive yield of 10.4 Mt (DOE, 2000) vaporizing the island of Elugelab and leaving behind a deep crater about 1 km in diameter. Early analysis of Mike fallout debris showed the presence of two new isotopes of plutonium, plutonium-244 (^{244}Pu) and plutonium-246 (^{246}Pu), and lead to the discovery of the new heavy elements, Einsteinium and Fermium. Operation Castle involved a single nuclear test on Enewetak in 1954 and 5 high-yield tests on Bikini. A total of 11 nuclear tests were also conducted on Enewetak in 1956 as part of Operation Redwing including an air burst from a balloon located over water.

In 1958, the United States anticipated the acceptance of a call for suspension of atmospheric nuclear testing and assembled a large number of devices for testing before the moratorium

came into effect. From April through August 1958, 22 near-surface nuclear detonations were conducted on Enewetak Atoll either on platforms, barges or underwater, 10 tests were conducted at Bikini Atoll, 2 tests near Johnston Atoll, and a high altitude test conducted about 100 kms west of Bikini Atoll. Most nuclear tests conducted on Enewetak Atoll were detonated in the northern reaches of the atoll and produced highly localized fallout contamination of neighboring islands and the atoll lagoon. As a consequence, the northern islands on Enewetak received significantly higher levels of fallout deposition containing a range of fission products, activation products and unfissioned nuclear fuel. By the time the test moratorium came into effect on 31 October of 1958, the United States had conducted a total of 43 nuclear tests on and around Enewetak Atoll.

Post Testing Era and Initial Cleanup Activities

Enewetak Atoll continued to be used for defense programs until the start of a cleanup and rehabilitation program in 1977. There were five feasible approaches considered by the Defense Nuclear Agency (DNA, 1981) for cleanup of Enewetak Atoll. The final plan called for 1) removing all radioactive and non-radioactive debris (equipment, concrete, scrap metal, etc.), 2) removing all soil that exceeded 14.8 Bq (400 pCi) of plutonium per gram of soil, 3) removing or amending soil between 1.48 and 14.8 Bq (40 and 400 pCi) of plutonium per gram of soil, determined on a case-by-case basis depending on ultimate land-use, and 4) disposing and stabilizing all this accumulated radioactive waste into a crater on Runit Island and capping it with a concrete dome. Over 4,000 U.S. servicemen assisted in the cleanup operations, with 6 lives lost, in what became known as the Enewetak Radiological Support Project (DOE, 1982). Over 73,000 cubic meters of surface soil across 6 different islands was removed and deposited in Cactus crater on Runit Island. The Nevada Operations Office of the Department of Energy was responsible for certification of radiological conditions of each island upon completion of the project. The Operations Office also developed several large databases to document radiological conditions before and after the cleanup operations, and to provide data to update available dose assessments. The Enewetak cleanup was largely focused on the removal and containment of plutonium along with other heavy radioactive elements. However, even during this early period of cleanup and rehabilitation, the adequacy of cleanup of the northern islands on Enewetak was brought into question because predictive dose assessments showed that ingestion of cesium-137 and other fission products from consumption of locally grown terrestrial foods was the most significant route of human exposure to residual fallout contamination in the environment.

The people of Enewetak remained on Ujelang Atoll until resettlement of Enewetak Island in 1980. Between 1980 and 1997, the resettled population was periodically monitored for internally deposited radionuclides by scientists from the Brookhaven National Laboratory using whole body counting and plutonium urinalysis (Sun *et al.*, 1992; 1995; 1997a; 1997b). More recently, the Department of Energy agreed to design and construct a radiological laboratory on Enewetak Island, and help develop the necessary local resources and technical expertise to maintain and operate the facility on a permanent basis. This cooperative effort was formalized in a Memorandum of Understanding signed by the United States Department of Energy, the Republic of the Marshall Islands, and the Enewetak/Ujelang Local Atoll Government in August of 2000 (MOU, 2000). Construction on the Enewetak Radiological Laboratory was completed in May of 2001. The laboratory facility incorporates both a permanent whole body counting system

to assess radiation doses from internally deposited cesium-137, and clean living space for collecting *in-vitro* bioassay samples. Scientists from the Lawrence Livermore National Laboratory continue to support the operation of the facility, and are responsible for systems maintenance, training, quality assurance and performance testing.

WHOLE BODY COUNTING

What is Whole Body Counting? | What Will the Whole Body Counting Show? | Estimating Doses from Cesium-137 Based on Whole Body Counting | Performance Evaluation | Doses Delivered to Residents of Enewetak Atoll and Nonresident Citizens of the Enewetak Atoll Population Group | Summary

What is Whole Body Counting?

The whole-body counting systems installed in the Marshall Islands contain large volume radiation detectors made of sodium iodide, and are designed to measure gamma-rays coming from radionuclides deposited in the human body. The detector systems are modeled after the 'Masse-Bolton Chair' design (Fig. 3) and can be used to detect high-energy, gamma-emitting radionuclides such as cesium-137 and cobalt-60 in most of the body and all of the internal organs. Using established procedures, the whole-body counting measurement data are converted into an annual effective dose using specially designed computer software (Canberra, 1998a; 1998b) and a dose report immediately issued to program volunteers.

Daily check counts of the whole-body counting system are performed using a mixed-gamma point source method. The check count quality assurance procedure was developed by cross-reference to a Bottle Manikin Absorption (BOMAB) phantom (or human surrogate) calibration source containing a standard mix of gamma-emitting radionuclides traceable to the United States National Institute of Standards and Technology (NIST). Local Marshallese technicians are responsible for all daily operations within the facilities including scheduling of personal counts, performing systems performance checks, and for reporting of data to program volunteers. The technicians receive an initial period of training at the Lawrence Livermore National Laboratory. Scientists from the Lawrence Livermore National Laboratory provide on-going technical support services, advanced training in whole-body counting and basic health physics, and perform a more detailed data quality assurance appraisal before any data are released in reports or posted to the Marshall Islands website.



Fig. 3. A whole body counter detector system and BOMAB calibration phantom situated on Enewetak Island, Enewetak Atoll.

Wherever possible, the whole-body counting program in the Marshall Islands is conducted using the same quality control requirements as established under the United States Department of Energy Laboratory Accreditation Program (DOELAP) for internal dosimetry. A systems background and other quality control counts are performed daily to ensure that the measurement systems conform to all applicable quality requirements. Also, the whole-body counting facilities participate in performance testing under the umbrella of the Intercomparison Studies Program (ISP) at the Oak Ridge National Laboratory. These performance test samples are distributed around to each of the facilities in the Marshall Islands following an initial count using the *mirror* whole-body counting training facility located at Livermore under the Marshall Islands Program.

The performance of each facility is then evaluated by comparing results with those obtained by the Hazards Control Department at the Lawrence Livermore National Laboratory—a DOELAP accredited facility—and with reference values supplied by the Oak Ridge National Laboratory. Based on our external quality assurance program, the Marshall Island Program whole-body counting facilities consistently conform to ANSI Standard N13.30-1996 (ANSI/HPS N13.30-1996, 1996) performance criteria for measurement bias and precision (Kehl *et al.*, 2007; 2010; 2014).

What Will Whole-Body Counting Show?

The main pathway for exposure to residual fallout contamination in the northern Marshall Islands is through ingestion of cesium-137 contained in locally grown foods such as coconut, *Pandanus* fruit and breadfruit (Robison *et al.*, 1980; 1997a; 1997b; Robison and Hamilton, 2010). The strategic objective of the Marshall Islands Whole Body Counting Program is to offer island residents an unprecedented level of radiation protection monitoring until such time that it is clearly demonstrated that radiation surveillance measures can be relaxed. The value of whole body count radiation protection monitoring resides in the fact that the data provides a direct measure of radionuclide uptake by local populations. Information about potential *high-end* health risks and seasonal fluctuations in the body burden of cesium-137 within various Marshallese cohort population groups can be assessed from repeated measurement data rather than relying on a range of assumptions from different dietary scenarios.

In combination with environmental monitoring data, residents who receive a whole-body count showing the presence of cesium-137 can now make an informed decision about their eating habits or life-style based on what is considered a 'safe' or acceptable health risk. The Republic of the Marshall Islands Nuclear Claims Tribunal has adopted a standard for cleanup of radioactively contaminated sites of 0.15 milliSievert (mSv) per year (or 15 mrem per year) [EDE, Effective Dose Equivalent] using a lifetime cancer risk criterion recommended by the United States Environmental Protection Agency (EPA). As displaced communities return to their ancestral homelands, the Marshall Islands Whole Body Counting Program will allow the United States Department of Energy to closely monitor resettled and resettling atoll populations, and provide assurances that radiation related health risks remain at or below established standards.

Estimating Doses from Cesium-137 Based on Whole-Body Counting

People living in the Marshall Islands may be exposed to cesium-137 contained in their diets from eating locally grown food crop products such as coconut. Whole-body counting provides a direct measure of the amount of cesium-137 inside peoples' bodies. The biokinetic behavior of cesium-137 inside the human body is well known and allows information from the whole-body counter to be converted to a radiation dose. The radiation dose is what is used to quantify the potential health risks associated with radiation exposure. The Marshall Islands dose reporting and data graphics on the Marshall Islands website (<https://marshallislands.lnl.gov/>) are based on the calendar year committed effective dose equivalent (CEDE) from intakes of cesium-137 in the year of measurement projected over 50 years (Daniels *et al.*, 2007). Dose equivalents are given in units of joule per kilogram or sievert (Sv). The conventional unit for dose equivalents used by federal and state agencies in the United States is the rem. Doses from exposure to environmental radioactivity (natural or nuclear test-related) are normally expressed as 1/1000th of the base unit, i.e., in milliSievert (mSv) or millirem (mrem). 1 mSv is equal to 100 mrem.

Information Note: The methodologies for computing doses from the whole-body counting and plutonium urinalysis programs have been outlined in a Technical Basis Document (refer to Daniels *et al.*, 2007). The same calculation algorithms are being used by the Individual Monitoring WBC Report application on the Marshall Islands website. This methodology uses a 50-y dose commitment and complies more fully with the International Commission on Radiological Protection (ICRP) methodology compared with the algorithms previously used for dose reporting.

Performance Evaluation of the Whole Body Counting Program

Whole-body counting facilities in the Marshall Islands as well as a *mirror* facility maintained at the Lawrence Livermore National Laboratory participate in bi-annual performance evaluation exercises conducted under the umbrella of the Intercomparison Studies Program (ISP) at the Oak Ridge National Laboratory. The ISP was specifically designed to help support whole-body counting facilities comply with quality requirements established under the United States Department of Energy Laboratory Accreditation Program (DOELAP). In this way, the Marshall Islands Radiological Surveillance Program has established quality assurance measures that are consistent with standard requirements used to monitor Department of Energy workers in the United States.

The performance evaluation samples for whole-body count measurements are prepared in a mock-up geometry that simulates a human body torso, and usually contains a mix of barium-133 (^{133}Ba), cobalt-60 (^{60}Co), cesium-137 (^{137}Cs) and yttrium-88 (^{88}Y) isotopes at nominal concentrations of ≤ 500 nCi (or 18.5 kBq) contained in a '5-bottle phantom'. The ISP at Oak Ridge use stock isotope solutions indirectly traceable to the National Institute of Standards and Technology (NIST). Details concerning the NIST stock solutions and ISP spikes used in the preparation of the whole-body count performance evaluation samples can be found elsewhere (ISP Report, 2010; 2011; 2012). For practical purposes we have limited performance evaluation testing of the Marshall Island whole-body counting facilities to detection and measurement of cesium-137.

For testing purposes, the relative bias (% , B_{ri}) for the i^{th} measurement conducted in a facility shows how close the measured activity (A_i) is to the actual spike value (A_{ai}), and is defined as;

$$B_{ri} = (A_i - A_{ai}) / A_{ai} \times 100$$

The relative bias (% , B_r) for any whole body count facility is calculated as the average of the individual relative biases B_{ri} , and is defined as;

$$B_r = \sum_{i=1}^n \frac{B_{ri}}{N}$$

where N is the number of test measurements performed within each facility. The acceptance criteria for the relative measurement bias statistic based on the ANSI 13.30-1996 standard for radiobioassay service laboratory quality control, performance testing, and accreditation in the United States is -25% to +50%.

The estimated, mean relative bias statistic for the Utrök (Majuro), Enewetak, Rongelap, and LLNL facilities for 5-bottle ORNL performance evaluation exercises conducted between 2010 and 2012 were 21.7%, 20.7%, 20.0%, and 31.8%, respectively. This compares with ANSI Standard N13.30-1996 acceptance criteria for radiobioassay service laboratory quality control, performance testing and accreditation, in the United States, of -25% to +50%. The results for each performance evaluation exercise conducted between 2010 and 2012 are shown graphically (Fig. 4) with the acceptance criteria represented by Upper (UCL) and Lower (LCL) Control Limits.

The relative precision (% , S_B) of the measurements performed across each whole-body count facility is the relative dispersion of the values of Br_i from their mean Br , and is defined as;

$$S_B = \sqrt{\frac{\sum_{i=1}^N (Br_i - Br)^2}{(N - 1)}}$$

The acceptance criteria for the relative measurement precision statistic (S_B) based on ANSI Standard N13.30-1996 is less than or equal to 40%. The estimated, mean relative precision statistic for the Utrök (Majuro), Enewetak, Rongelap, and LLNL facilities based on performance evaluation exercises conducted between 2010 and 2012 were 14.8%, 6.5%, 5.8%, and 7.4%, respectively.

The combined mean relative bias and relative precision statistic across the three remote Marshall Islands whole-body counting facilities were 20.8% and 9.0%, respectively. Consequently, whole-body count facilities in the Marshall Islands have consistently passed ANSI Standard N13.30-1996 performance criteria for relative measurement bias and precision during the reporting period (also see Kehl *et al.*, 2007; 2010; 2014).

ANSI Standard N13.30-1996 has been revised and now uses a combined standard error of 25% (combined bias and precision) (ANSI/HPS N13.13-2011, 2011). It is not clear when this new standard will be fully implemented under the Department of Energy Laboratory Accreditation Program. However, steps have already been taken to reduce bias and improve precision to help ensure that the Marshall Islands Whole Body Counting Program can continue to meet all applicable quality requirements.

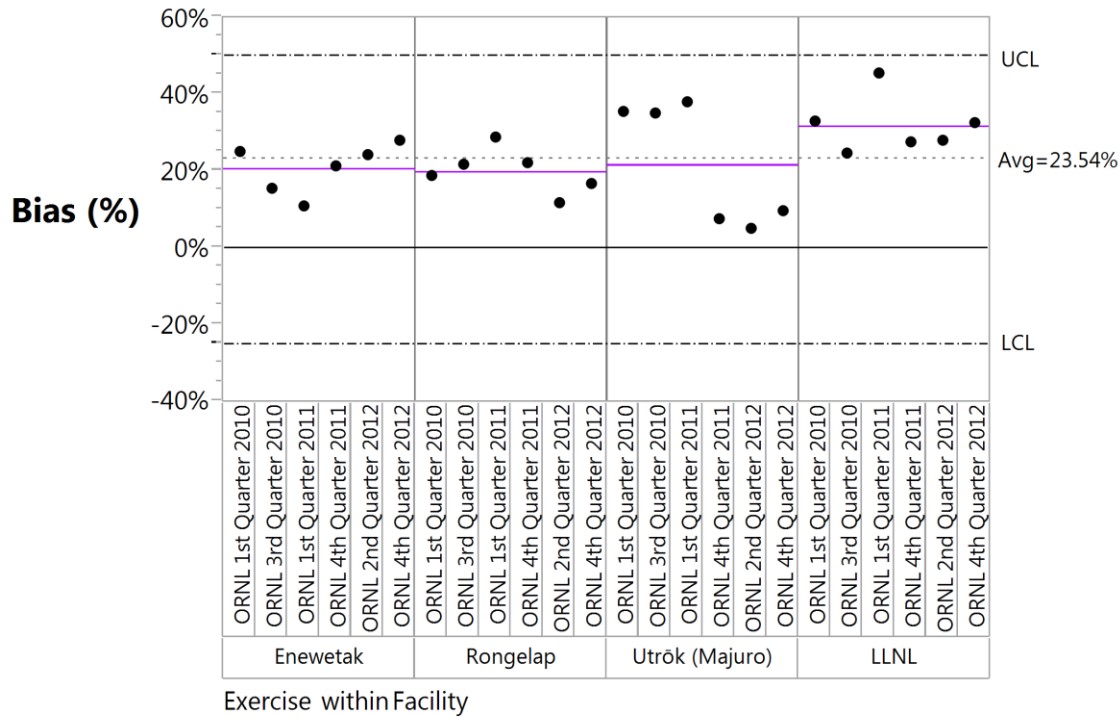


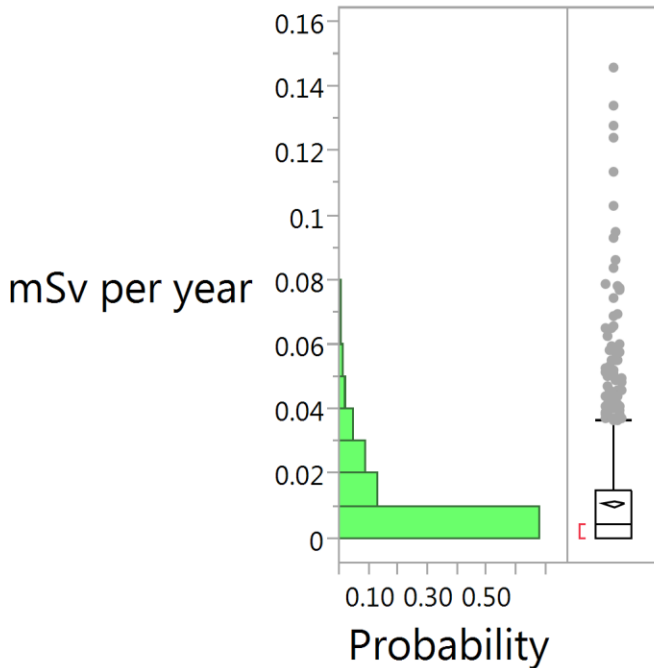
Fig. 4. Repeatability and Reproducibility (R&R) variability/gauge plot showing results of whole-body count analyses of 5-bottle performance evaluation test samples distributed under the Intercomparison Studies Program (ISP) at the Oak Ridge National Laboratory (ORNL) (2010-2012).

Doses Delivered to Residents of Enewetak Atoll and Nonresident Citizens from the Enewetak Atoll Population Group

The individual measurement and dosimetric data for the Marshall Islands Whole Body Counting Program (2010-2012) are available on the Marshall Islands website, <https://marshallislands.llnl.gov/>.

These data and information are not to be used in scientific reports without permission.

Dose distribution plots of the committed effective dose equivalent for internally deposited cesium-137 for the Enewetak resident population and nonresident citizens of the Enewetak population group are shown in Fig. 5 and Fig. 6, respectively.



[Basic statistics: Mean = 0.011; Median = 0.004; Std. Err. Mean = 0.0005; 95% CI (mean value) = 0.010-0.012; N = 1021]

Fig. 5. Distribution/Box plot of the committed effective dose equivalent (mSv per year) delivered to residents of Enewetak Atoll (2010-2012) from internally deposited cesium-137.

In general the whole body count dose distributions for various population group cohorts in the Marshall Islands are highly skewed and contain disproportionate numbers of non-detects. A more detailed statistical analysis of these data will be published elsewhere using censored data techniques.

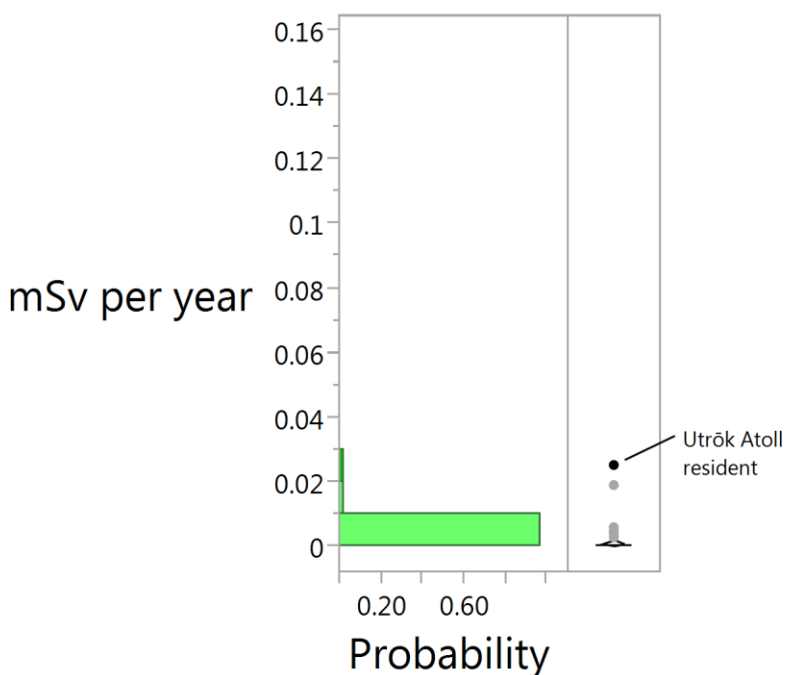
The estimated, population average (mean value) effective dose delivered to residents of Enewetak Atoll during 2010-2012 from internally deposited cesium-137 is 0.011 mSv per year [95% CI (mean value) = 0.010-0.012; N=1021] or 1.1 mrem per year (Fig. 5). The mean and median values are about double those values observed during 2007-2009 (Hamilton *et al.*, 2014). The maximum exposed individual on Enewetak during 2010-2012 received an estimated effective annual dose of 0.14 mSv (14.5 mrem) from internally deposited cesium-137.

The population average effective dose delivered to nonresident citizens of the Enewetak population group (2010-2012) is 0.0009 mSv per year [95% CI (mean value) = -0.00005-0.0019; N=65] (Fig. 6). The nonresident population group data was compiled from volunteers identifying as citizens of Enewetak who declared that they had not spent time living on Enewetak Atoll during the course of the measurement year in question.

It appears that the dose data for the resident population during 2010-2012 is skewed higher compared with previous years because more residents are receiving a measureable dose from living and working on the northern islands of Enewetak Atoll. It is known that many of these volunteers are working and, in some cases, living on northern islands digging for copper to sell to scrap metal buyers from South Korea and China. Moreover, our Marshallese whole

body counting technicians are making a conscious effort to monitor this subgroup because foods growing on the northern islands are known to contain higher than average concentrations of cesium-137 compared with islands in the south. There has also been a growing interest in harvesting of sea cucumber from across the atoll for export to Asian markets. This again implies that potentially more people are spending time living and working on the northern islands compared with previous years.

The dependence of where people gather locally grown foods to eat on the cesium-137 dose distribution for 2010-2012 is highlighted in Fig 7. The dose distribution delivered to volunteers from internally deposited cesium-137 who self-identified as spending time (i.e., days, weeks or months) living or working on the northern islands during the measurement year is shown in Fig. 7A. This can be compared with the dose distribution for the general population residing on the southern islands as shown in Fig. 7B.

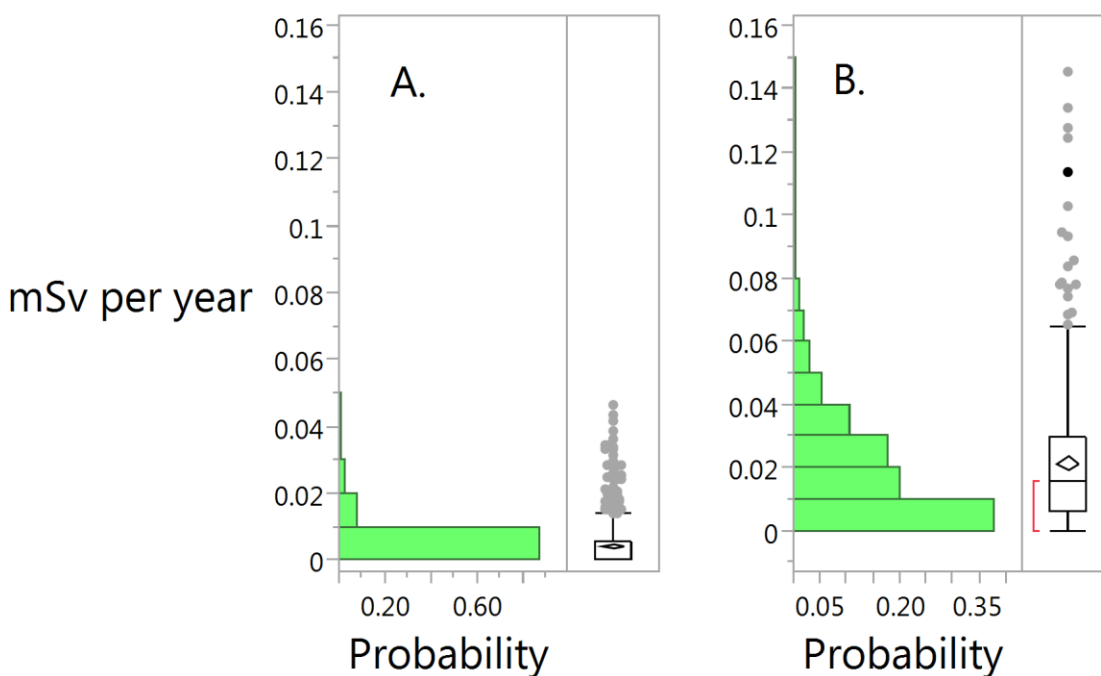


[Basic Statistics: Mean = 0.0009; Median = <0.00001; Std. Err. Mean = 0.0005; 95% CI (mean value) = -0.0001-0.0019; N = 65]

Fig. 6. Distribution/Box plot of the committed effective dose equivalent (mSv per year) delivered to nonresident citizens of the Enewetak population group (2010-2012) from internally deposited cesium-137.

In this instance, the population average committed effective dose equivalent for internally deposited cesium-137 for these two subgroups during 2010-2012 was 0.021 mSv per year (95% CI (mean value) = 0.019-0.024; N = 392) and 0.004 mSv per year (95% CI (mean value) = 0.00036-0.00047; N = 629), respectively, or about a factor of 5 times higher for the northern island cohort compared with those volunteers residing in the south. We suspect that some volunteers may be reluctant about self-reporting about their activities on the northern islands. Moreover, there are probably other examples where the whole body counting technicians simply neglect to record the appropriate information in the personnel database. If this is true, there will likely be an even higher risk differential between these two subgroups, albeit at dose levels that are low compared with international standards for protection of the public. Moreover, all individual annualized doses reported from the whole body counting program at Enewetak for 2010-2012 fall below the Republic of the Marshall Islands dose criterion for cleanup of radioactively contaminated sites of 0.15 mSv (or 15 mrem) per year.

It should be noted that for the purposes of developing these summary graphics and statistics, a whole body count showing a non-detect for internally deposited cesium-137 was assigned a radiation dose equal to zero. The critical level (L_c) for detection of cesium-137 using whole body counting in the Marshall Islands is around ~0.05 kBq.



A. Basic Statistics: Mean = 0.004; Median = 0.0000; Std. Err. Mean = 0.0003; 95% CI (mean value) = 0.00036-0.00047; N = 629

B. Basic Statistics: Mean = 0.021; Median = 0.016; Std. Err. Mean = 0.001; 95% CI (mean value) = 0.019-0.024; N = 392

Fig. 7. Distribution/Box plot of the committed effective dose equivalent (mSv per year) from internally deposited cesium-137.

Plot A. General resident population living on the southern islands of Enewetak Atoll.

Plot B. Occupants and visitors to the northern islands of Enewetak Atoll.

This equates to an integral annual dose detection limit of about 0.002 mSv per year (0.2 mrem per year) for an adult male or an annual effective dose detection limit of about 0.0025 mSv (or 0.25 mrem). Consequently, any minor dose contribution that is overlooked (<0.0025 mSv per year) could be accounted for by reporting doses as values of equal to or less than 0.0025 mSv per year for nondetects. Similarly, the reported summary statistics could be adjusted to reflect average measures and ranges of not less than the detection limit, i.e., 0.025 mSv per year.

Summary

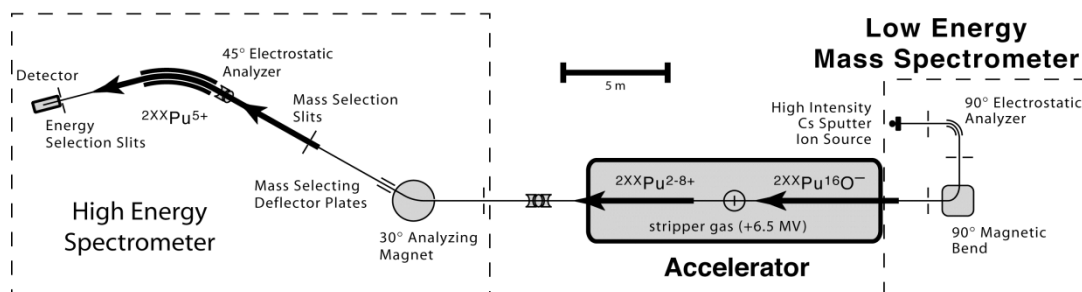
The estimated annual effective dose from internally deposited cesium-137 on Enewetak Atoll can be compared with the natural background dose of 1.9 mSv per year in the Marshall Islands and 3.1 mSv per year in the United States. Dose estimated based on internally deposited cesium-137 for all program volunteers independent of where they live were also well below the annual dose criteria of 1.0 mSv per year, excluding medical irradiation, imposed in 10 CFR Part 20 (NRC, 1994) for protection of the public.

The Republic of the Marshall Islands Nuclear Claims Tribunal has adopted a standard for cleanup of radioactively contaminated sites in the Marshall Islands of 0.15 mSv (15 mrem) per year. Under present day living conditions in the Marshall Islands, cesium-137 ingestion dominates the nuclear tested-related dose from exposure to residual fallout contamination in the environment. Data derived from the Marshall Islands whole body counting program are therefore likely to provide a good measure of the total risk posed by exposure to residual fallout contamination in the environment.

In this instance, the results from the whole body counting program on Enewetak Atoll appear to demonstrate that the vast majority of residents are not being exposed to significantly elevated levels of cesium-137 in their diets. However, we recognize that people of Enewetak Atoll receive periodic shipments of imported foods under the U.S. Department of Interior supplemental food program. There are periods between supply shipments where stocks of imported foods on island become depleted and the resident population eats more local food. Moreover, as population dynamics change there may be added pressure on the resident population to make wider use of resources across the entire atoll. The continuing whole body counting program on Enewetak Island will help ensure that local inhabitants, especially those who occasionally 'binge' on locally grown foods from the northern islands, are adequately monitored and protected. This is of particular concern because it has now been clearly demonstrated that the most critically exposed group on Enewetak are those residents who visit the northern islands of Enewetak Atoll for extended periods of time. The tree food crops growing on these islands are known to contain higher than average concentrations of cesium-137 (as well as other fallout radionuclides) relative to the same products growing on the main residence islands in the south.

PLUTONIUM URINALYSIS (BIOASSAY) MONITORING

What is Plutonium Urinalysis Monitoring? | Routes of Human Exposure | What is the Purpose of Plutonium Urinalysis Monitoring? | Methods of Detection | Methods Validation | Plutonium Urinalysis Monitoring on Enewetak Atoll | Plans for the Future



A schematic diagram of the systems configuration for analysis of plutonium isotopes in bioassay samples using Accelerator Mass Spectrometry (AMS). AMS is about 200 to 400 times more sensitive than standard techniques commonly employed in routine internal dosimetry programs, and far exceeds the standard requirements established under the latest United States Department of Energy regulation 10CFR 835, for in-vitro bioassay monitoring of workers who routinely handle plutonium-239.

What is Plutonium Urinalysis Monitoring?

Plutonium urinalysis is a very sensitive *in-vitro* bioassay measurement technique used to determine the amount of plutonium in human urine as a means of estimating the systemic burden (or total amount of plutonium) in the human body. Plutonium urinalysis tests are performed by collecting urine bioassay samples from individuals over a 24-hour period. Under the Marshall Islands Radiological Surveillance Program, we have developed a new state-of-the-art technology for measuring the amount of plutonium in urine based on accelerator mass spectrometry. The test turns a urine sample into a powder which scientists analyze by counting the number of plutonium atoms contained in the sample.

Everybody has a small amount of plutonium in their bodies. Plutonium occurs in nature at very low concentrations but human exposure to plutonium increased dramatically through the 1950s as a result of global fallout from atmospheric nuclear weapons testing. Marshall Islanders are potentially exposed to higher levels of contamination in the environment as a result of exposure to close-in and regional fallout contamination.

Routes of Human Exposure

Plutonium is an important radioactive element produced in nuclear explosions. Plutonium emits alpha particles (or alpha-rays). Alpha-particles have a short range in tissue (about ~40 μm) and cannot be measured by detectors external to the body. However, as heavy slow moving charged particles, alpha-particles have a high relative effectiveness to disrupt or cause harm to biological cells. As a consequence, *in-vitro* bioassay tests have been developed to test for the presence of systemic plutonium inside the human body based on measured urinary excretion patterns and modeled metabolic behaviors of the absorbed radionuclides.

The main pathway for exposure to plutonium in humans is inhalation of contaminated dust particles in the air that people breathe. Inhaled or ingested plutonium may eventually end up in various organs – especially the lung, liver and bone – resulting in continuous exposure of these tissues to alpha particle radiation. Plutonium also remains in the body for a long time but the systemic uptake of plutonium in people living in the northern Marshall Islands is still expected to be very low (Robison *et al.*, 1980; 1982; 1997a; 1997b).

Inhalation exposure can be estimated from the product of the soil concentration, resuspension enhancement factors and inhalation dose conversion factors for radionuclides of interest. These estimates show that the projected dose contribution from exposure to plutonium in the Marshall Islands is less than 5% of the total lifetime dose from exposure to residual fallout contamination in the environment. However, plutonium is a major concern to people living in the northern Marshall Islands because of its long half-life and persistence in the environment. Moreover, radioactive debris deposited in lagoon sediments of coral atolls formed a reservoir and potential long-term source for remobilization and transfer of plutonium through the marine food chain and potentially to humans. Elevated levels of plutonium in the terrestrial environment represent potential inhalation and/or ingestion hazards. Early characterization of the terrestrial environment has also revealed the presence of hotspots containing milligram-sized pieces of plutonium metal that required some form of remediation (DOE, 1982). Consequently, dose assessments and atoll rehabilitation programs in the Marshall Islands have historically given special consideration to monitoring the uptake of plutonium in resettled and resettling populations (Sun *et al.*, 1995; 1997a).

What is the Purpose of Plutonium Urinalysis Monitoring in the Marshall Islands?

Plutonium urinalysis is a measurement technique that ultimately provides information on the amount of plutonium people have in their bodies. Although plutonium is expected to be a minor contributor to the total nuclear test-related dose, it is a concern to people living in the northern Marshall Islands because of its long half-life ($T_{1/2} = 24,000$ years) and proportionally higher levels of plutonium found in close-in or regional fallout contamination. Consequently, the United States Department of Energy has agreed to monitor resettlement workers and perform a limited number of urinalysis tests on island residents using advanced measurement technologies available at the Lawrence Livermore National Laboratory. The measurement technique currently employed at the Lawrence Livermore National Laboratory is based on accelerator mass spectrometry. Accelerator mass spectrometry is about 200 to 400 times more sensitive than monitoring techniques commonly employed in occupational internal dosimetry monitoring programs within the United States, and far exceeds the standard requirements established

under the latest Department of Energy regulation 10CFR 835 for *in-vitro* bioassay monitoring of plutonium-239.

The Marshall Islands Plutonium Urinalysis Monitoring Program was implemented under the following action plan.

- 1) To provide more reliable and accurate data to assess *baseline* and potentially significant incremental uptakes of plutonium within resettled and/or resettling populations in the Marshall Islands.
- 2) To monitor plutonium exposure in critical population groups such as workers involved in soil remediation or agriculture.
- 3) To demonstrate and document that occupational and/or public exposures to plutonium in the Marshall Islands are below levels that will have an impact on human health.
- 4) To ensure that our plutonium bioassay data meet all applicable quality requirements through the use of standardized procedures and performance testing.
- 5) To document and test the reliability of using environmental data to assess human exposure (and uptake) to plutonium in coral atoll ecosystems, and predict future change.

Methods of Detection of Plutonium in Urine

Researchers from the Brookhaven National Laboratory (BNL) were the first to use whole-body counting and plutonium urinalysis techniques to assess intakes of internally deposited radionuclides in Marshallese populations (Sun *et al.*, 1992a; 1995; 1997a; 1997b; Conard, 1992; Lessard *et al.*, 1984; Miltenberger *et al.*, 1981; Greenhouse *et al.*, 1980). Classical methods for evaluating intakes of plutonium in bioassay samples include alpha-spectrometry and fission-track analysis. Alpha spectrometry cannot distinguish between plutonium-239 and plutonium-240, and results are normally reported for the sum of the two isotopes. Moreover, alpha spectrometry lacks the necessary detection sensitivity to accurately assess plutonium exposure in the Marshall Islands (Hamilton *et al.*, 2007a). Fission Track Analysis (FTA) is limited to the quantification of plutonium-239 but with a reported detection limit (MDA, Minimum Detectable Amount) of around 1 to 3 microBecquerel (μBq) of plutonium-239 that offers a greatly improved potential over alpha-spectrometry for assessing low-level chronic exposures to plutonium in the environment.

Under the Lawrence Livermore National Laboratory Marshall Islands Plutonium Urinalysis Program, bioassay samples were initially sent to the University of Utah for analysis of plutonium using fission track analysis. Fission is a process where heavy nuclei such as plutonium and uranium break up into two large fragments. Fission may occur spontaneously or be induced by collisions with neutrons. During fission track analysis samples are exposed to a source of neutrons in a reactor while in contact with a quartz or plastic slide. Any resulting fission fragments will leave behind tracks on the slide that can be counted under an optical microscope to determine the amount of plutonium present. Historically, fission track analysis has been

plagued with a number of deficiencies including the use of less than reliable and tedious preparative methods, low chemical yields, contamination issues and inaccurate quantification. The University of Utah and the Brookhaven National Laboratory improved on the fission track process methodology, and adopted a more rigorous approach to data reduction and quality assurance in support of urinalysis testing programs in the Marshall Islands.

Over the past decade, scientists from the Lawrence Livermore National Laboratory have developed a state-of-the-art technology for measurement of plutonium isotopes in bioassay samples based on accelerator mass spectrometry (Brown *et al.*, 2004; Hamilton *et al.*, 2007a). The technique has vastly improved the quality and reliability of assessments of urinary excretion of plutonium from Marshall Islanders, and avoids many of the disadvantages of using conventional atom counting techniques, fission track analysis or other competing new technologies.

Information Note: *There are two main isotopes of plutonium in the environment—namely plutonium-239 (^{239}Pu) and plutonium-240 (^{240}Pu). The isotopic composition of plutonium (i.e., the relative amounts of ^{239}Pu and ^{240}Pu) may vary significantly depending on the source of plutonium. For example, the $^{240}\text{Pu}/^{239}\text{Pu}$ content of nuclear fallout from high-yield atmospheric nuclear tests in the Marshall Islands produced $^{240}\text{Pu}/^{239}\text{Pu}$ atom ratio signatures of ~ 0.35 compared with that present in integrated global fallout deposition (~ 0.18) or unfissioned nuclear fuel (~ 0.05). Consequently, it may be possible to use bioassay testing and plutonium isotopic measurements as an investigative tool to assess historical and/or contemporary source/event specific exposures.*

Method Validation

Method validation is the process used to monitor and document the quality of the measurements. Methods validation testing under the Marshall Islands Urinalysis Monitoring Program has included participation in an independent interlaboratory exercise organized by the United States National Institute of Standards and Technology (NIST). The results of this exercise clearly demonstrate that accelerator mass spectrometry is well suited for detection of microBecquerel (μBq) concentrations of plutonium-239 and plutonium-240 in bioassay samples (Fig. 8) (Marchetti *et al.*, 2002). An independent report has since been published (McCurdy *et al.*, 2005) providing a level of validation for use of this technology under the Marshall Islands Program.

We also continue to test the performance of the technique by analyzing externally prepared quality control natural urine samples artificially spiked with known amounts of plutonium (Fig. 9). These quality control performance test samples are prepared under contract with the Intercomparison Studies Program (ISP) at the Oak Ridge National Laboratory (ORNL), and are analyzed along with routine bioassay samples collected from the Marshall Islands. The activity concentration of plutonium-239 in the quality control samples is kept below 200 μBq in order to avoid possible cross-contamination problems.

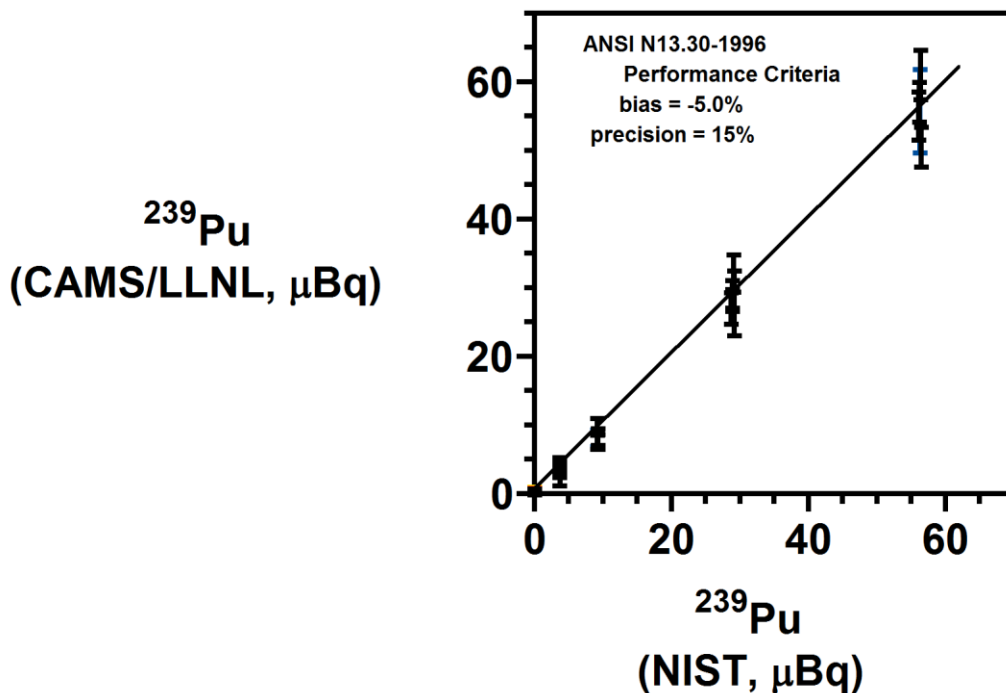


Fig. 8. Results of an interlaboratory exercise conducted by the National Institute of Standards and Technology (NIST) on determination of plutonium-239 in synthetic urine in the microBecquerel (μBq) range.

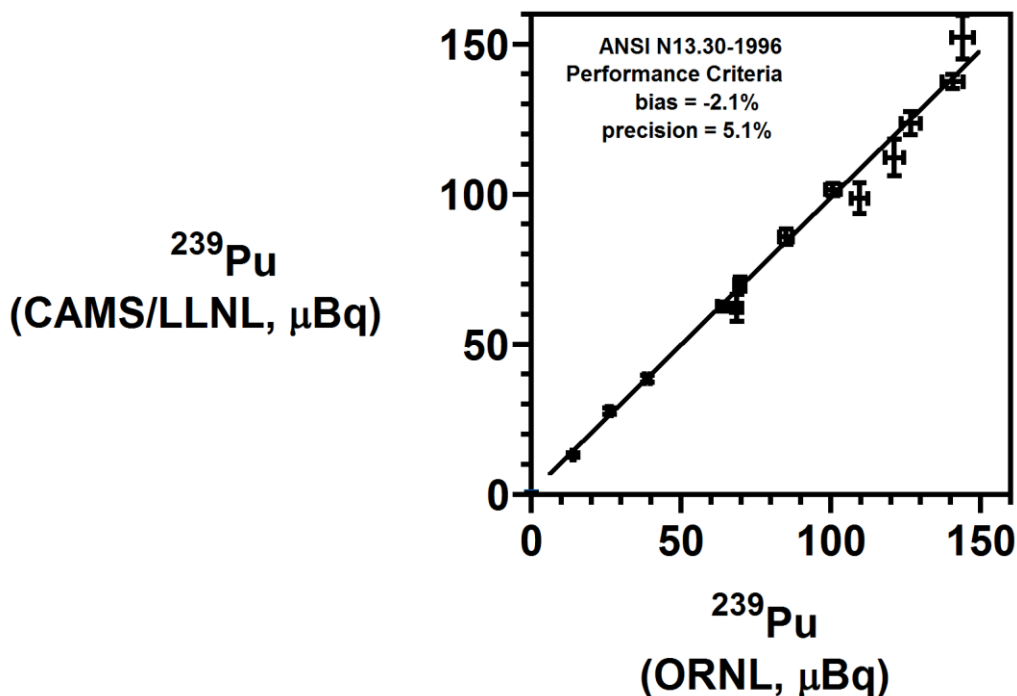


Fig. 9. Analyses of externally prepared natural matrix spiked performance evaluation test samples (2010-2102) prepared under the auspices of the Intercomparison Studies Program (ISP) at the Oak Ridge National Laboratory (ORNL).

The plutonium-240/plutonium-239 atom ratio in test samples approximates that observed in integrated worldwide fallout deposition, i.e., ~0.2. Results of these quality control sample analyses are sent to Oak Ridge National Laboratory researchers for review and, in return, they prepare a data quality assurance report. All quality control data must pass ANSI Standard N13.30-1996 performance criteria for accuracy and precision before acceptance of any routine bioassay measurement data. The combined average, measurement bias and precision for measurement of plutonium-239 between 2010 and 2012 based on analysis of spiked performance test samples prepared by Oak Ridge National Laboratory and analyzed by accelerator mass spectrometry (2010-2012) were -2.1% and $\pm 5.1\%$ (N = 13). The methodologies employed under the Marshall Islands Urinalysis Monitoring Program are considered representative of the state-of-the-art in routine internal dosimetry monitoring of plutonium for the general public.

Plutonium Urinalysis Monitoring on Enewetak Atoll

All individual measurement and dosimetric data from the Marshall Islands Plutonium Urinalysis Monitoring Program are available on the Marshall Islands website, <https://marshallislands.llnl.gov/>.

The original plutonium urinalysis bioassay sampling program on Enewetak Atoll involved 5 periodic sample collections of 40 to 50 volunteers between 2001 and 2005 (Hamilton *et al.*, 2006; 2007b). At the request of the Enewetak-Ujelang Atoll Local Government priority was given to collecting bioassay samples from three main cohort groups; (1) agricultural workers, (2) Enewetak residents born during the 1940-50s; and (3) Enewetak residents born during the early 1980s who had mostly lived at Enewetak Atoll. Some additional bioassay samples were collected through 2006 in order to investigate occurrences related to measurement data that either failed outlier tests and/or other internal quality control criteria or whose value exceeded the dose criterion investigation threshold (see under 'follow-up'). Where investigations have been performed and the results are significantly different, QA accepted re-analysis results were typically used in developing summary statistics and for investigating the systematics of urinary excretion of plutonium in relation to age, occupation and gender (Bogen *et al.*, 2006; Hamilton *et al.*, 2007b). Today, we continue to monitor for plutonium exposure on Enewetak with added emphasis on assessing incremental changes in urinary excretion of plutonium in association with different work activities and land-use practices. For example, it was brought to our attention during the review period that some individuals have been spending extended periods of time working on the northern islands digging for copper cables or collecting sea cucumber, Trochus, fish and other marine species. Some of this work was performed on Runit Island where levels of plutonium in surface soils may exceed 5 kBq kg⁻¹ dry soil (Hamilton, *et al.*, 2009). This has raised some concerns over the potential for 'copper diggers' to be at increased risk from plutonium exposure from resuspension of contaminated soil in air.

In general, urinary excretion of plutonium from Marshallese populations will consist of a long-term baseline component from residual systemic burdens acquired from all previous exposures plus any prompt (new) contributions (and eventual long-term excretion) resulting from recently acquired systemic burdens of plutonium. It is reported that people living in the Northern Hemisphere have acquired sufficiently high systemic burdens of plutonium from exposure to

global fallout contamination to produce urinary excretion rates of plutonium of around 2 to 4 μBq per 24-h void (Boecker *et al.*, 1991). Based on fission track analysis, scientists from Brookhaven National Laboratory estimated that exposure to worldwide fallout contamination in Marshall Islands will produce background urinary excretion rates of plutonium of 1 to 2 μBq per 24-h void (NRC, 1994). Both measures are an order of magnitude higher than contemporary measurements of urinary excretion of plutonium from Marshallese populations based on accelerator mass spectrometry (Bogen *et al.*, 2006; Hamilton *et al.*, 2007b; 2014). It is therefore safe to conclude that the high-quality bioassay data previously developed for the Enewetak resident population (2001-2006) using accelerator mass spectrometry yield urinary excretion rates that are at least comparable to, or potentially lower than, reported urinary excretion rates of plutonium from people exposed to world-wide fallout contamination. Plutonium excretion from the Enewetak resident population group also appears to be monotonically related to volunteer age (Bogen *et al.*, 2006).

All the high-quality measurement data developed for the Enewetak resident population group through 2006 were well below the occupational action level established under the latest Department regulation 10 CFR 835 in the United States for *in vitro* bioassay monitoring of plutonium-239 (Hamilton *et al.*, 2007a). Moreover, the individual bioassay samples contained levels of plutonium-239 that were not significantly different to the critical level ($L_c \sim 0.25 \mu\text{Bq}$) needed to accurately determine if plutonium was actually present in the bioassay samples or not. Excluding outliers, the analyses of plutonium-240 in bioassay samples from Enewetak through 2006 returned a combined mean null value of $<0.1 \mu\text{Bq}$ of plutonium-240 per 24-h void, and was indistinguishable to the concentration of plutonium-240 measured in field blanks. Subsequently, plutonium-240 measurements were not included in the analytical scheme or reporting for 2007-2009. Similarly, plutonium-240 was not included in the analytical measurement scheme or reporting for 2010-2012. The algorithm on the Marshall Islands website has subsequently been modified to compute the dose contribution from plutonium-239 alone as the actual analyte of interest being measured. As such, the reported 50-y committed dose equivalent calculations contained in this report do not give any consideration to the presence of plutonium-240. For clarity, this omission effectively underestimates the reported dose contribution from plutonium by an average of 40% but could range between 15 to 65% percent.

A more detailed statistical analysis of these preliminary plutonium bioassay data for the Enewetak resident population group is given by Bogen *et al.* (2006) taking into account the uncertainty of the measurements. However, the age-related trend is supported heuristically based on Fisher exact, extended Fisher exact and Bartholomew's trend tests without regard to measurement error based on the proportion of plutonium values $>0.35 \mu\text{Bq}$ per 24-h void with increasing age of the program volunteers (Table 1). As shown, the proportion of values $>0.35 \mu\text{Bq}$ per 24-h void increases from 19 % in the <35 year age-group to 52% in those workers who are 45 years of age or older. By comparison, only 4% of field blanks contained $>0.35 \mu\text{Bq}$ of plutonium-239.

Table 1. Fraction of bioassay samples collected from the Enewetak resident population group (2001-2006) containing >0.35 μBq of plutonium-239 versus volunteer age (Bogen *et al.*, 2006).

Atoll	Sample group	N	Number of values >0.35 μBq
Enewetak Atoll (median age = 36.0 years)	field blanks	50	4%
	<35 y	103	19%
	35<45 y	41	34%
	> 45y	50	52%

N = number of field blank measures or the number of volunteers in each age-group.

As previously discussed, urinary excretion rates of plutonium from the Enewetak resident population group are at or below those levels expected for people exposed to worldwide contamination. As such, there appears to be no discernible evidence of elevated levels of plutonium uptake associated with resettlement of Enewetak Atoll. However, for completeness, we attempt to assign a dose to all the measurement data posted on the Marshall Islands website using the modified default assumptions as described above (after Daniels *et al.*, 2007).

The Marshall Islands Program bioassay database for Enewetak Atoll was expanded during 2007-2009 and 2010-2012 to include data on an additional 18 and 119 bioassay samples, respectively, plus associated field blanks. The 2010-2012 Enewetak collection was focused on local residents of Enewetak Atoll and developing data for a control cohort of Enewetak people living on Kona, Hawaii. Many volunteers living on Enewetak self-identified as spending time (nominally weeks to several months) working or living on the northern islands of Enewetak. The plutonium-239 bioassay data for these two Enewetak subgroups along with comparative data for the general Marshallese population are summarized graphically in Fig. 10. These preliminary data and associated statistical measures include measurement data that are still under investigation but do exclude an outlier from the field blank and the general population sample collections. All available data are included in the summary tables presented the Appendix (see Table 2A).

The measured urinary excretion of plutonium-239 from the Enewetak resident cohort collection ranged from -0.16 to 0.98 μBq per 24-h void with an error-weighted average of 0.19 μBq [95% CI (mean value) = 0.15 - 0.24 ; $N=91$]. These data can be compared with an error weighted average plutonium-239 content of field blanks (excluding one outlier) of -0.02 μBq , and an error weighted urinary excretion rate of plutonium-239 from the Kona control cohort of 0.097 μBq per 24-h void [95% CI (mean value) = 0.024 - 0.171 ; $N=28$]. Based on nonparametric comparisons using a Wilcoxon method, there appears to be a statistically significant difference (p value <0.0001) in the plutonium-239 content of bioassay samples collected from the resident population group living on Enewetak compared to the plutonium-239 content of field blanks but not between the Kona control cohort collection and the field blank collection (p value = 0.052). A larger, more representative, number of Kona samples will be needed to statistically substantiate these findings.

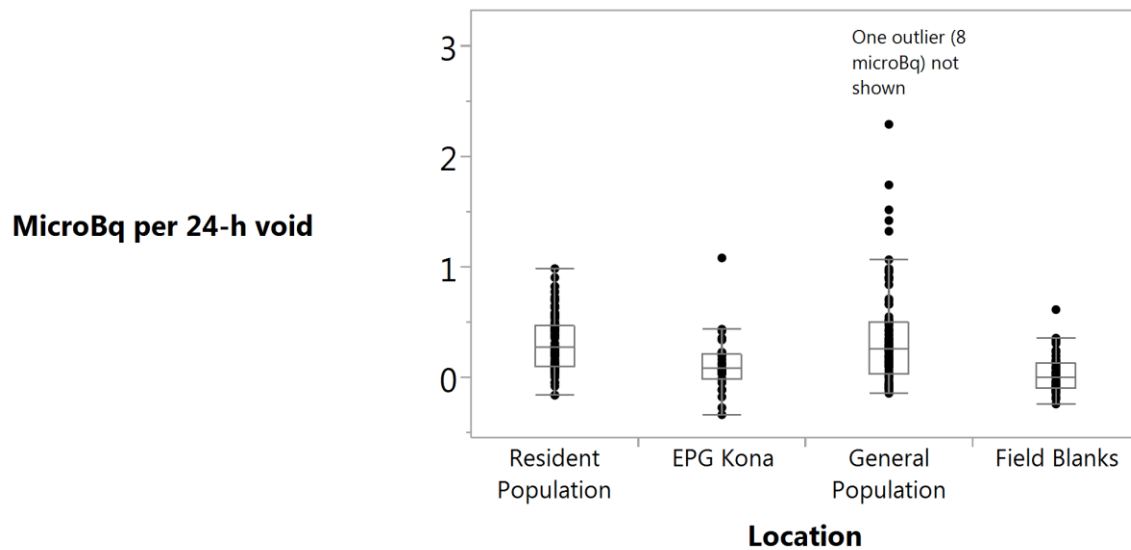


Fig. 10. Plutonium-239 (μBq per 24-h void) content of bioassay samples collected during 2010-2012.

Resident Population = volunteers from the resident population living on Enewetak Atoll.

EPG Kona = volunteers from the Enewetak population group (EPG) living on the Big Island of Hawaii (Hawai'i).

General Population = volunteers from the General Population (mainly includes residents of Utrök Atoll, nonresidents of the Utrök population group and nonresidents of the Rongelap population group).

Field Blank = Process sample bottle blank samples collected in the Marshall Islands and on Kona, HI, and handled and processed in exactly the same manner as the human urine bioassay samples.

A Cumulative Distribution Function (CDF) Plot of the plutonium-239 (μBq per 24-h void) content of bioassay samples for the resident population on Enewetak is shown in Fig. 11. The bioassay data has been grouped between volunteers who have lived and worked on the northern islands of Enewetak versus volunteers from the general population. Despite the higher perceived risk of exposure from plutonium on the northern islands, these data appear to show that there is no statistically significant difference (p value = 0.78) in urinary excretion of plutonium-239 between the two subgroups. Moreover, all the individual bioassay measurement data contain relatively large uncertainties and fall close to the reported critical level (L_c) of measurement (Table 2A).

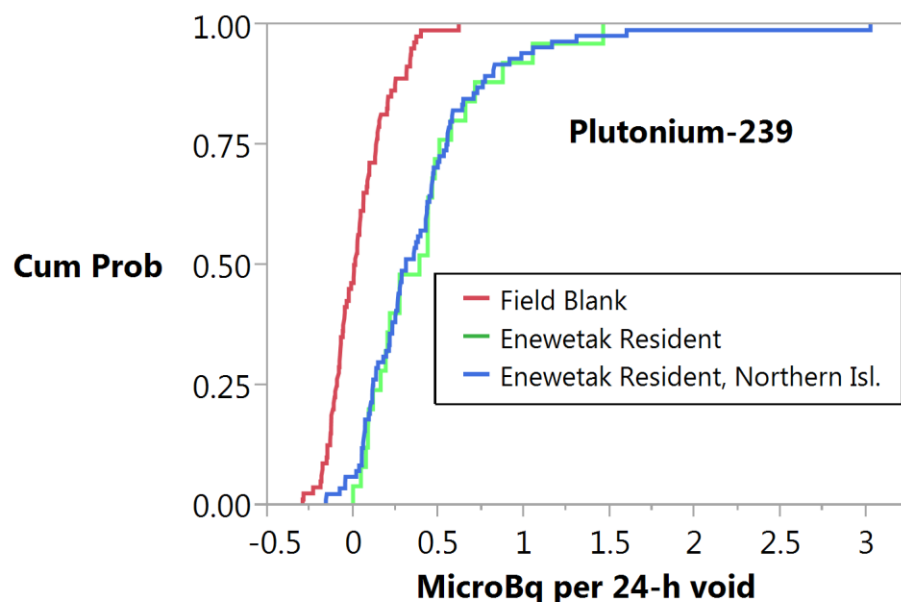


Fig. 11. Cumulative Distribution Function (CDF) Plot of the plutonium-239 (μBq per 24-h void) content of bioassay samples collected from residents of Enewetak Atoll.

Field Blank = Process sample bottle blank samples collected in the Marshall Islands and on Kona, HI, and handled and processed in exactly the same manner as the human urine bioassay samples.

Enewetak Resident = volunteers who have lived predominantly on the main residence islands in the southern reaches of Enewetak Atoll during 2007-2009 and 2010-2012.

Enewetak Resident, Northern Isl. = volunteers on Enewetak who have traveled to, worked or lived on the northern islands of Enewetak at any time during the course of the past two reporting periods (2007-2009 and 2010-2012).

It should be noted that several measurements from both groupings fall into the investigation (Inv) level and/or appear as potential outliers. Efforts will be made to re-sample these individuals at first opportunity and to publish an updated statistical analysis.

Based on the urinary excretion data, the population average, 50-y committed effective dose equivalent delivered to Enewetak residents from plutonium-239 during 2010-2012 is around $86 \mu\text{Sv}$ (or 8.6 mrem). The maximum 50-y estimated committed effective dose equivalent from plutonium-239 is $350 \mu\text{Sv}$ (or 35 mrem). It should be noted that the annualized dose criteria developed for remediation of radioactively contaminated sites (NCRP, 2004) in the United States is usually based on estimates of the total effective dose equivalent (TEDE) over 50 years. The TEDE consists of the sum of the committed dose due to intakes of fallout radionuclides (of which, plutonium-239 is just one potential isotope) and the deep dose equivalent from external exposures experienced during the measurement year.

Plans for the Future

Prior to establishing the existing sample collection and measurement protocols at the Lawrence Livermore National Laboratory, much of the early urinary excretion data for plutonium in the Marshall Islands was of questionable quality. This largely resulted from poor quantification sensitivity of the detection methods employed and/or from the general lack of quality control in sample collection and measurement. In addition to expanding the plutonium bioassay database for the Enewetak resident and Kona control cohort population groups, we plan to develop high-quality baseline data for other atoll population groups including baseline plutonium excretion data for those individuals who plan to resettle Rongelap Island.

Such provisions should help provide assurances to resettled and resettling populations concerned about long-term exposure to residual fallout contamination in the Marshall Islands. Additionally, by establishing a well-documented baseline for urinary excretion of plutonium from Marshall Island populations, we will be better able to track and monitor potential changes in exposure conditions on the atolls. This is especially true of conditions that may affect the remobilization and transfer of plutonium through the aquatic food chain or from potential increases in inhalation exposure associated with resettlement of islands or atolls, remediation activities, commercial development and/or changing land-use patterns. One such condition on Enewetak Atoll relates to those workers who are living on the northern islands for extended periods of time digging for copper cables or collecting sea cucumber, *Trochus* and possibly other products for commercial sale. Repeated measures of individuals (especially for the investigatory individuals) will also enhance the ability to subtract previous year doses and provide a more accurate determination of Effective Dose Equivalent.

MEASUREMENT DATA FROM THE INDIVIDUAL RADIOLOGICAL SURVEILLANCE MONITORING PROGRAM

Introduction | Individual Measurement Database

Introduction

The individual (de-identified) measurement data for all program volunteers are accessible on the Marshall Islands website (<https://marshallislands.lln.gov/>) using menu driven routines (Fig. 12).

Whole-body counting provides a direct measure of the total amount of cesium-137 present in the human body at the time of measurement. The amount of cesium-137 detected is usually reported in activity units of kilo-Becquerel (kBq), where 1 kBq equals 1000 Bq and 1 Bq = 1 nuclear transformation per second (t s^{-1}). The detection of plutonium-239 and plutonium-240 in bioassay (urine) samples indicates the presence of internally deposited (systemic) plutonium in the human body. At Livermore, plutonium bioassay measurements are performed using a state-of-the-art technology based on accelerator mass spectrometry (Brown *et al.*, 2004; Hamilton *et al.*, 2007a). Under the Marshall Islands Plutonium Urinalysis Program, the urinary excretion of plutonium from program volunteers is usually described in activity units, expressed as micro-Becquerel (μBq) of plutonium-239 and, if detectable, plutonium-240 excreted (lost) per day (d^{-1}); where $1 \mu\text{Bq d}^{-1} = 10^{-6} \text{ Bq d}^{-1}$ and $1 \text{ Bq} = 1 \text{ t s}^{-1}$.

Individual Monitoring Measurement Report

Instructions

To view the most recent results of your individual measurement data, select your personal ID:

Rongelap Atoll Select Personal ID ▼	Enewetak Atoll Select Personal ID ▼
Utrök Atoll Select Personal ID ▼	Other Atolls Select Personal ID ▼

Fig. 12. Layout of the menu structure used to access individual measurement data from the Marshall Islands website, <https://marshallislands.lln.gov/>.

Individual Measurement Database

The Marshall Islands website provides electronic access to all whole-body counting and plutonium urinalysis data developed under the Marshall Islands Individual Radiological Surveillance Program (1999–present). Please note that measurement data developed for Enewetak Atoll residents are generally given a EN prefix identification number whereas people from other atolls (with exception of those people living on Rongelap and Utrök Atolls) are given an MI prefix identification number.

DOSIMETRIC DATA AND METHODOLOGY

Introduction | Dose Methodology

Introduction

The individual (de-identified) dose reports for program volunteers participating in the Marshall Islands Individual Radiological Surveillance Monitoring Program are accessible on the Marshall Islands website (<https://marshallislands.llnl.gov/>) using menu driven routines (Fig. 13).

In general, nuclear transformations emit energy and/or particles in the form of gamma rays, beta particles and alpha particles. Tissues in the human body may absorb these emissions with the potential for any deposited energy to cause damage and disrupt biological function of cells. The general term used to quantify the extent of any health risk from radiation exposure is referred to as the dose. The equivalent dose is defined by the average absorbed dose in an organ or tissue weighed by the average quality factor for the type and energy of the radiation causing the dose. The effective dose equivalent (as applied to the whole body) is the sum of the average dose equivalent for each tissue weighted by tissue weighing factors. The International System (SI) unit of effective dose equivalent is the joule per kilogram (J kg^{-1}), named the sievert (Sv). The conventional unit often used by federal and state agencies in the United States is called a rem; $1 \text{ rem} = 0.01 \text{ Sv}$.

Based on measurements of the internally deposited cesium-137 and/or the urinary excretion of plutonium, an estimate can be derived for either or both radionuclides of the annual number of nuclear transformations (t y^{-1}) that occurred in the body during the measurement year. For both radionuclides, this result is the time integral of activity in the body of an individual normalized over a one-year measurement period. In addition to nuclear transformations occurring during the year of measurement, additional transformations may occur in the future due to the presence of residual activity in the body at the end of the measurement year. The number of transformations derived from the residual radioactivity is usually evaluated up to 50 years in the future [a conservative maximum as defined by the United States Environmental Protection Agency (EPA) for members of the public] resulting in a committed dose. Accordingly, these future transformations will commit additional dose to the individual according to the biological half-life of the radioactive element of concern. For this reason, it is considered appropriate and conforming with the national and international recommendations of the U.S EPA and the International Commission on Radiological Protection (ICRP) that this additional dose commitment be assigned to the year of measurement. Consequently, dose reports issued under the Marshall Islands Radiological Surveillance Program are based on the Committed Effective Dose Equivalent (CEDE), often abbreviated in this report as the annual effective dose.

Individual Monitoring Dose Report

Instructions

To view the most recent results of your individual Individual Dose Report, select your personal ID:

Rongelap Atoll
 ▼

Enewetak Atoll
 ▼

Utrok Atoll
 ▼

Other Atolls
 ▼

Fig. 13. Layout of the menu structure used to access individual dosimetric data from the Marshall Islands website, <https://marshallislands.llnl.gov/>.

Dosimetric Methodology

The calendar year dose represents the sum of radionuclide-specific, age-dependent, committed effective dose equivalent for each monitored radionuclide. The total calendar year dose is calculated over a calendar year but only applies to the sum of the committed dose from cesium-137 and the 50-y integrated dose from plutonium (based on a time integral of any whole-body counting and any available plutonium bioassay measurements performed during that year). When only one radionuclide is measured, the total dose assigned in a year and the CEDE for a specific radionuclide are identical. When more than one radionuclide is measured, the total annual ‘calendar year’ dose is the sum on the CEDE for each measured radionuclide. The calendar year dose estimates based on whole-body counting and plutonium bioassay are conservative in nature, especially in relation to committed dose contributions from plutonium, and exclude dose contributions from external radiation exposure and from other internally deposited radionuclides such as the other isotopes of plutonium, and strontium-90 (after Daniels *et al.*, 2007).

For comparison, the Marshall Islands Nuclear Claims Tribunal has established a standard of 0.15 mSv (15 mrem) per year (EDE) for cleanup and rehabilitation of radioactively contaminated sites in the northern Marshall Islands.

PROVIDING FOLLOW-UP ON RESULTS

All volunteers participating in the Marshall Islands Radiological Surveillance Program are issued a preliminary copy of their dose report immediately after receiving a whole-body count. Scientists from the Lawrence Livermore National Laboratory verify the measurement data and, if required, issue a revised measurement dose report. Statistically significant individual whole-body counter or plutonium bioassay measurement data that yield computed doses of 0.1 mSv (10 mrem) or higher will normally evoke some type of pre-determined action or investigation (refer to the discussion outline below). These actions will nearly always lead to follow-up

verification measurements but may also include a dietary evaluation and/or a work history review. Below dose levels of 0.1 mSv, default assumptions for assigning doses (Daniels *et al.*, 2007) are assumed to be valid and no further action is taken. Data may be withheld from the website and/or hard copy reports while any investigations are on-going. The Lawrence Livermore National Laboratory Marshall Islands Program action level (0.1 mSv) is one-tenth of the investigation level used for occupational workers throughout the United States Department of Energy and two-thirds of the United States Environmental Protection Agency guideline for cleanup of radioactively contaminated sites (0.15 mSv). In addition, at the end of each calendar year, all program volunteers receive a formal written report containing an estimate of their 'calendar year dose' based on all available verified data for that year. Program volunteers are also invited to discuss their concerns with local technicians and/or to contact Terry Hamilton at Lawrence Livermore National Laboratory for more information.

Due to the very conservative nature of our dose methodology and preference not to trivialize doses no matter what the level, we anticipate that the default assumptions for calculating committed doses from low-level plutonium bioassay measurements will occasionally yield values that exceed the 0.1 mSv investigation level. In some cases, doses in excess of 0.1 mSv will not necessarily evoke a follow-up response. The reasoning for this is that the low-level plutonium bioassay measurements usually contain a relatively large uncertainty where the confidence level (nominally tested at $3 \times$ measurement MDA) spans the investigation action level. As such, dose estimates are computed for all the measurement data but the scope of any follow-up action may be limited to those sample analyses that are clearly distinguishable from the measurement MDA or upon receiving specific requests from concerned individuals. All data are reported but may be revised depending on findings of any follow up actions. In this case a revised Individual Dose Reports may also be issued.

EXTERNAL DOSE CALCULATOR

This website application functions using a combination of Goggle Maps API code, PHP, JavaScript, and HTML. On opening, a map of Rongelap Island is displayed with data markers (Fig. 14). Drop-down list boxes include links to other locations in the northern Marshall Islands wherever data are available. The data markers represents points contained in a database of static dose rate measurements of *in-situ* gamma exposure rates to cesium-137. These data were collected using Model 935 and Model 940 Surveillance and Measurement (SAM) *in-situ* gamma spectrometers supplied by Berkeley Nucleonics Inc. (BNC) with no other corrections applied. Each data point in the database is also linked to the geographical position, the date of measurement and a site designator. Site designator descriptions (e.g., island interior, house, beach, etc.) are color coded and displayed to the right of the map with a notes field describing how to select a region of interest and compute out an external dose rate. The dose rate is displayed in a table format in units of milliSievert (mSv) and millirem (mrem). In general, external gamma exposure to residual cesium-137 in the environment contributes about 10-15% of the total nuclear test-related dose in the Marshall Islands.

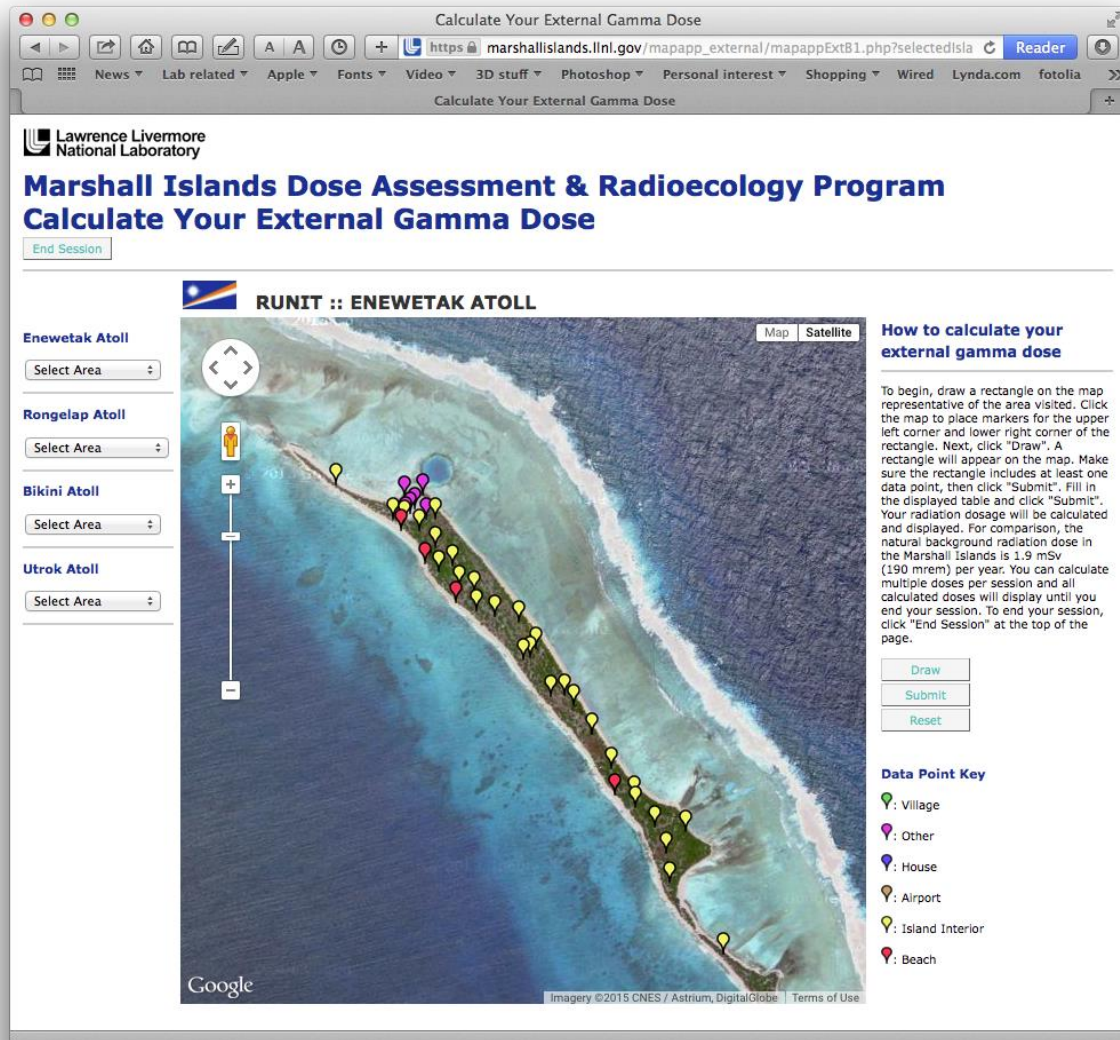


Fig. 14. A sample External Dose Calculator website page featuring Runit Island, Enewetak Atoll.

INGESTION DOSE CALCULATOR (NEW)

The Lawrence Livermore National Laboratory has developed a series of interactive internet applications to provide the public with an open access platform to learn more about radiological conditions in the Marshall Islands. The ingestion dose calculator application described here is one such feature whereby users can calculate hypothetical ingestion doses from cesium-137 based on interactive user input matched to environmental data on the activity concentration of cesium-137 contained in food plants such as coconut, breadfruit, *Pandanus*, and arrowroot. Users are asked to enter a date, an island and atoll location, a plant food type, and a daily intake amount (highlighted by the number of portions eaten per day in estimated gram equivalents). The application computes the user daily dose and the user equivalent annualized

dose, and then compares the results with default settings based on a dietary model developed for the Marshall Islands from independent dietary surveys. Environmental data are decay corrected to the date entered by the user using an effective half-life of cesium-137 of 8.5 years (after Robison, *et al.*, 2003).

The website application functions using a combination of Google Maps API code, PHP, JavaScript, and HTML. On entering the site, a map of Rongelap Island is displayed along with a drop-down menu linking to maps of islands and atolls in the northern Marshall Islands (Fig 15). The data collection and mapping feature is limited to the four main nuclear affected atolls of Bikini, Enewetak, Rongelap and Utrök (also known in the literature as the ‘four affected atolls’). Data markers on the map represent site locations in the database containing available measurement data on the activity concentration of cesium-137 in food plants. Each data marker contains information such as the GPS site coordinates, the measured activity concentration of cesium-137 in Bq g⁻¹ (wet wt.), the date the item was collected, the island designator, and a category descriptor on the type of plant food or fruit, e.g., drinking coconut meat, drinking coconut juice, copra meat, copra juice, *Pandanus* fruit (*Pandanus* spp.), breadfruit (*Artocarpus* spp.) or Polynesian arrowroot (*Tacca leontopetaloides*). Users may select a specific location on an island, a whole island or multiple islands on an atoll by drawing a rectangle on a map containing at least one measurement data point. Once users are satisfied with their selection, selecting ‘submit’ opens an input table.

The input table allows the user to enter a date, and the number of hypothetical daily servings of food consumed for each food group or type. For the purposes of this website application, we have loosely followed what constitutes a standard serving using guidance developed by the U.S. Department of Agriculture (USDA) under the Food Guide Pyramid, and by the Nutrition Facts label under the regulation of the U.S. Food and Drug Administration. For milk type products such as drinking coconut and copra juice, we designate a standard serving as 1 cup or 226 g. For all other food plant products, we consider a standard serving as a ½ cup or 113 g. The website also uses a series of default settings to compute an annual effective dose (milliSievert, mSv per year) for the food plants selected using a standard model diet consumption table. The standard model diet used in the current version of this website application is based on living patterns where imported foods are available or the IA (imported foods available) model diet as described by Robison *et al.* (1997a).

After entering the relevant information and selecting the ‘submit’ button, the website application runs a cesium-137 dose algorithm as described below.

$$\text{Effective Dose } (\mu\text{Sv}) = \sum [C \times \exp(-\lambda_{eff}t)] \times (CA \times DCF) \text{ (Single Intake)}$$

where,

C = Activity concentration of cesium-137 in the food group (Bq g⁻¹).

CA = Consumption amount (g)

DCF = Committed Dose Equivalent per unit intake (Sv Bq⁻¹) (ICRP, 1993).

t = Number of days between sample collection and consumption.

λ_{eff} = Effective half-life decay constant for cesium-137 in vegetation ($\lambda_{\text{eff}} = 0.000223$) (after Robison *et al.*, 1997a).

n = Number of individual food types consumed.

For user annualized and model diet dose calculations, the consumption amount is replaced with the daily intake rate (g d^{-1}) multiplied by 365 (days in a year) to give the annual effective dose (mSv y^{-1}). To enable users to select multiple areas on multiple islands and atolls, the application assigns each user a random session identification number upon opening the website. Each calculated dose is stored until the user ends the session or leaves the website, at which point the user's session identification number and information are deleted.

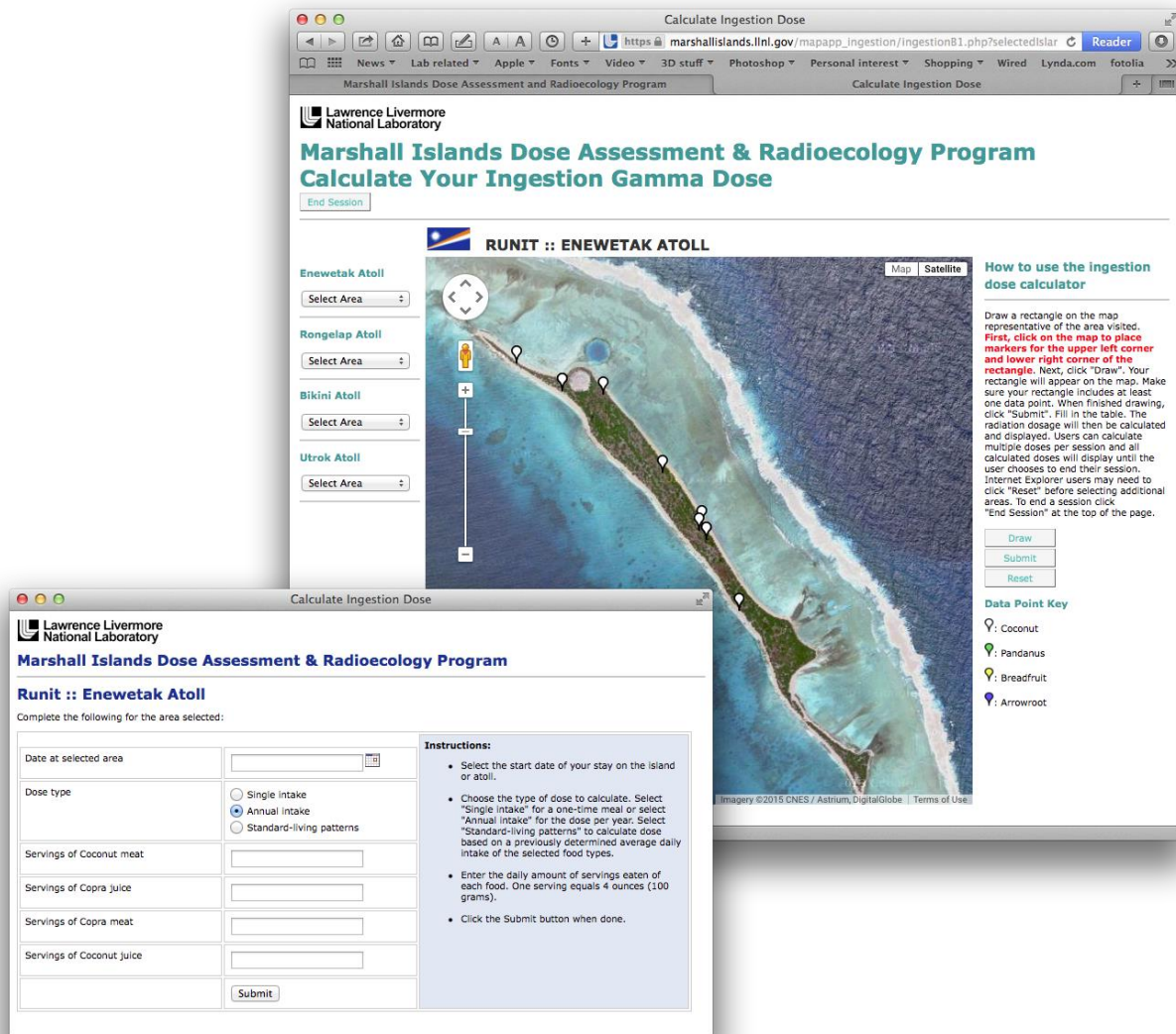


Fig. 15. A sample Ingestion Dose Calculator website page featuring Runit Island, Enewetak Atoll.

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GLOSSARY OF TERMS

Absorbed Dose

The absorbed dose is the energy deposited in an organ or tissue per unit mass of irradiated material. The International System (SI) unit of absorbed dose is the joule per kilogram (J kg^{-1}) and its special name is the gray (Gy). The common unit still used by U.S agencies for absorbed dose is the rad, which is equivalent to 100 ergs per gram of material. One Gy is the same as 100 rad.

Activity

Activity is the rate of transformation or decay of a radioactive material. The International System (SI) unit of activity is the reciprocal second (s^{-1}) and its special name is the Becquerel. Federal and state agencies in the United States use conventional units where activity is expressed in curies (Ci); $1 \text{ Ci} = 3.7 \times 10^{10} \text{ Bq}$.

Alpha Particles

Alpha particles are one of the primary types of radiation associated with radioactivity and exist as energetic nuclei of helium atoms, consisting of two protons and two neutrons. Alpha rays are heavy, slow moving charged particles that travel only 2 to 5 cm in air, and can be stopped by a piece of paper or the outer dead layer of human skin.

Background Radiation

The average person in the United States receives about 3.6 mSv (360 mrem) of ionizing radiation every year. About 3 mSv (300 mrem) per year comes from natural background radiation including cosmic radiation and radiation emitted by naturally occurring radionuclides either in the environment (e.g., in air, water, soil and rock) or deposited in tissues inside the body. The other 0.60 mSv (60 mrem) is derived from man-made sources such as exposures to diagnostic X-rays, and consumer products such as smoking tobacco. The general worldwide contribution from radioactive fallout contamination is <0.3% of the average total annual effective dose. Exposures to natural background radiation vary depending on the geographic area, diet and other factors such as the composition of materials used in the construction of homes. The natural background radiation dose in the Marshall Islands is around 1.9 mSv (190 mrem) per year and is significantly less than what most people receive in many other parts of the world.

Baseline

We have all been exposed to some level of worldwide fallout contamination. In the United States, the general population receives up to 0.015 mSv (1.5 mrem) (0.3% of their average total annual effective dose) from exposure to worldwide fallout contamination resulting from atmospheric nuclear weapons testing and about 0.005 mSv (0.5 mrem) (or 0.1% of the average total annual effective dose) from operations related to nuclear power generation. Similarly, people living in the Marshall Islands will have very small quantities of internally deposited fallout radionuclides such as cesium-137, strontium-90 and plutonium in their bodies from worldwide contamination of food, air, water and soil. Assessments of possible increases in radiation exposure from elevated levels of fallout contamination in the northern Marshall Islands can only be made on the basis of comparisons with residual systemic burdens of radionuclides acquired

from previous exposures. Under the Marshall Islands Radiological Surveillance Program, efforts are being made to improve on the reliability of measurements of systemic plutonium in Marshallese populations using state-of-the-art methodologies in bioassay against which the results of future bioassay measurements can be compared to accurately assess the impacts of resettlement on radiation exposure and dose.

Becquerel (Bq)

A Becquerel (abbreviated as Bq) is the International System (SI) unit for activity of radioactive material. One Bq of radioactive material is that amount of material in which one atom is transformed or undergoes one disintegration per second. Whole-body counting and plutonium bioassay measurements are usually reported in activity units of kBq (kiloBecquerel) (1000 Bq) and μBq (microBecquerel) (1×10^{-6} Bq), respectively.

Biokinetic

The word 'biokinetic' is used here to describe the absorption (uptake), distribution and retention of elements in humans.

Calibration

Calibration is the process of adjusting or determining the response or reading of an instrument to a standard.

Committed Dose Equivalent

The committed dose equivalent is the time integral of the dose-equivalent rate in a particular tissue that will be received by an individual following an intake of radioactive material into the body by inhalation, ingestion or dermal absorption. For adults, the committed dose is usually the dose received over 50 years. For children, the committed dose is usually calculated from the age of intake to age 70 years. For these age groups the term 'integrated dose equivalent' is used.

Committed Effective Dose Equivalent (CEDE)

The committed dose equivalents to various tissues or organ in the body each multiplied by an appropriate tissue-weighting factor and then summed. The international scientific (SI) unit of committed effective dose equivalence (CEDE) is the joule per kilogram or sievert (Sv). The conventional unit for committed effective dose equivalent used by Federal and State agencies within the United States is the roentgen equivalent man (rem). One Sv is the same as 100 rem. Chronic doses are usually reported in units of mSv ($1/1000^{\text{th}}$ Sv) or mrem ($1/1000^{\text{th}}$ rem)

Critical Level

The amount of a count (L_c) or final measurement of a quantity of an analyte at or above which a decision is made that the analyte is definitely present above background levels ($L_c \approx MDA/2$).

Default Assumptions (used in assignment of dose)

The largest dose contributions attributable to exposure to residual nuclear fallout contamination in the Marshall Islands result from either internal exposure from intakes of radionuclides through ingestion, inhalation and/or absorption through the skin or external exposure from radionuclides distributed in the soil. External exposure rates can be measured directly using instrument surveys of the radiation field. The assignment of dose to internally deposited radionuclides is much more complicated. Biokinetic and dosimetric models developed by the International Commission on Radiological Protection (ICRP) are used to convert whole-body burdens (from whole-body counting or from *in vitro* bioassay tests such as urinalysis) into dose. In the case of chronic exposure, organ and body burdens continue to build up over time until a steady state is reached, and where losses due to decay and excretion are balanced by intake and absorption. Cesium-137 has an effective half-life in an adult of about 110 days, and under chronic exposure conditions reaches a maximal dose contribution after about 2 years. By contrast, plutonium absorbed from the gastrointestinal or respiratory tract enters the blood stream and deposits in liver and bone with an effective half-life of 20 to 50 years. Only a small fraction of plutonium entering the blood stream is excreted in urine with the long-term excretion rate approaching 2×10^{-5} of the systemic body burden per day. Knowledge of excretion rates and time of exposure are important when interpreting urinalysis data. A more detailed discussion of the dose calculation methodology employed under the Marshall Islands is given elsewhere (see under Daniels *et al.*, 2007).

Direct bioassay

The measurements of radioactive material in the human body utilizing instrumentation that detects radiation emitted from radioactive material in the body (synonymous with *in vivo* measurements).

Dose Assessment

The scientific process used to determine radiation dose and uncertainty in the dose.

Dose Equivalent

The dose equivalent is the absorbed dose at a point in tissue multiplied by a biological effectiveness factor or quality factor for the particular types of radiation to cause biological damage. The International System (SI) unit for dose equivalent is the joule per kilogram ($J\ kg^{-1}$) and is called the sievert (Sv). A 1 Sv dose to an adult will normally produce some clinical signs of radiation sickness, requiring hospitalization.

Federal and state agencies in the United States use conventional units of dose equivalents based on the roentgen equivalent man (rem). One Sv is equal to 100 rem.

Effective Dose (ICRP 60)

The sum of the equivalent dose over specified organs and tissues weighted by the tissue weighting factor (ICRP, 1991). Supersedes the effective dose equivalent in ICRP and NCRP recommendations but is not used in current U.S. regulations.

Effective Dose Equivalent (ICRP 26)

The effective dose equivalent for the whole-body is the sum of dose-equivalents for various organs in the body weighted to account for different sensitivities of the organs to radiation. It includes the dose from radiation sources internal and/or external to the body. Superseded by the effective dose in ICRP and NCRP recommendations but often used in current U.S. regulations. The International System (SI) unit for dose equivalent is the joule per kilogram (J kg^{-1}) and is called the sievert (Sv). Federal and regulatory agencies in the United States usually express effective dose equivalent in roentgen equivalent man (rem). One Sv is equal to 100 rem.

Dose (exposure) Assessment

A quantification of the magnitude, duration and timing of radiation exposures, and the resulting doses from such exposures, based on all possible types of radiological agents involved and their primary pathways and routes of exposure.

Exposure Pathway

The physical route a hazardous substance takes in leading to the exposure of an organism.

External Dose or Exposure to Radiation

That portion of the dose equivalent delivered by ionizing radiation originating from a source outside the body of an organism (e.g., also known as direct radiation).

Fission Track Analysis

During neutron irradiation heavy nuclei such as uranium and plutonium undergo nuclear fission with release of large fission fragments. This property has led to the development of a number of measurement techniques such as delayed neutron activation analysis and fission track analysis. Fission track analysis is a measurement technique commonly employed in plutonium urinalysis (bioassay) monitoring programs. Urine samples are chemically treated to remove plutonium. The plutonium is then mounted in contact with a special plastic or quartz slide known as solid-state nuclear track detector (SSNTD). The slide along with the sample is then irradiated in a reactor where neutron-induced fission of plutonium-239 (or uranium-235) causes emission of energetic fission fragments. Some of the fragments penetrate into the SSNTD damaging the integrity of the material before coming to rest. The SSNTD is separated from the sample and chemically etched to expose the damaged areas (known as fission tracks) on the detector surface. The fission tracks are then counted under an optical microscope. The amount of plutonium (and/or uranium) present in the sample is a function of the total number of tracks generated and the total irradiation neutron flux.

Gamma-rays

Gamma-rays are electromagnetic waves produced by spontaneous decay of radioactive elements during de-excitation of an atomic nucleus. Sunlight also consists of electromagnetic waves but gamma-rays have a shorter wavelength and much higher energy. High-energy gamma-rays such as those produced by decay of cesium-137 may penetrate deeply into the body and affect cells. Gamma-rays from a cobalt-60 source are often used for cancer radiotherapy.

Half-Life

The Half-Life is time taken for the activity of a radionuclide to halve as a result of radioactive decay. Also used in more general terms to indicate the time taken for the quantity of a specified radionuclide in a specified place to halve as a result of any specified process or processes that follow similar exponential patterns of loss (e.g., biological half-life or effective half-life).

High-End Health Risk

Use of the term 'high-end health risk' usually relates to the maximally exposed individuals in a population.

In-Vitro

In-vitro measurements are synonymous with indirect bioassay techniques, such as plutonium urinalysis.

In-Vivo

In-vivo measurements are synonymous with 'within the living' monitoring techniques, such as whole-body counting.

Indirect bioassay

Measurements to determine the presence of and/or the amount of a radioactive material in the excreta, urine or in other biological materials removed from the body (synonymous with *in vitro* measurements).

Individual

An individual is any human being.

Internal Dose or Exposure or Radiation

That portion of the dose equivalent delivered by ionizing radiation originating from a radiation source inside the body of an organism (e.g., from intakes of radionuclides by ingestion, inhalation or dermal adsorption).

Isotope

Atoms with the same number of protons but different numbers of neutrons are called isotopes of that element. We identify different isotopes by appending the total number of nucleons (the total number of proton plus neutrons in the nucleus of an atom) to the name of the element, e.g., cesium-137. Isotopes are usually written in an abbreviated form using the chemical symbol of the element. Two examples include ^{137}Cs for cesium-137 and ^{239}Pu for plutonium-239.

Minimum Detectable Amount (MDA)

The minimum detectable amount (MDA) is the smallest activity or mass of an analyte in a sample or person that can be detected with an acceptable level of uncertainty.

Quality Assurance

All those planned and systematic actions necessary to provide adequate confidence that an analysis, measurement or surveillance program will perform satisfactorily.

Quality Control

Those actions that control the attributes of an analytical process, system or facility according to predetermined quality requirements.

Radiation Dose

A generic term to describe the amount of radiation a person receives. The common International System (SI) unit for dose is the joule per kilogram or sievert (Sv). The preferred unit for radiation dose used by federal and state agencies in the United States is the roentgen equivalent man (rem). Natural background and environmental radiation doses are usually expressed as 1/1000th of the base units as milliSievert (normally abbreviated as mSv) or millirem (normally abbreviated as mrem). One mSv is equal to 100 mrem.

Radiological Monitoring (Monitoring)

Radiological monitoring is the measurement of radiation levels or individual doses, and the use of the results to assess radiological hazards in the environment or workplace, or the potential and actual doses resulting from exposures to ionizing radiation.

Radioactivity

A natural and spontaneous process by which unstable atoms of an element emit energy and/or particles from their nuclei and, thus change (or decay) to atoms of a different element or a different state of the same element.

Remediation

Remediation is the actions taken to reduce risks to human health or the environment posed by the presence of radioactive or hazardous materials.

Risk

The probability of harm from the presence of radionuclides or hazardous materials taking into account (1) the probability of occurrences or events that could lead to an exposure, (2) probability that individual or populations would be exposed to radioactive or hazardous materials and the magnitude of such exposures, and (3) the probability that an exposure would produce a response.

Total Effective Dose Equivalent (TEDE)

The sum of the deep-dose equivalent (for external exposures) and the committed effective dose equivalent for external from intakes of radionuclides as described by the United States Nuclear Regulatory Commission under 10 CFR Part 20.1003.

Validation

Defining the process of the method capability and determining whether it can be properly applied as intended.

Whole Body

For the purposes of external exposure includes the head, trunk, the arms above and including the elbow, and legs above and including the knee.

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Appendix A

Individual Radiological Surveillance Monitoring Data Based on Whole Body Counting and Plutonium Urinalysis Bioassay

The following tables provide full disclosure of whole body counting and plutonium bioassay measurement data developed for residents of Enewetak Atoll and nonresident citizens of the Enewetak population group (2010-2012).

Table A1. Whole body count data on internally deposited cesium-137 (kBq) developed for Enewetak Atoll (2010-2012).

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00002	Adult	Male	25-Jan-2010	0.18 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00002	Adult	Male	31-Mar-2011	0.40 ± 0.04	0.16	Nal_WBC	RE
EN00002	Adult	Male	11-Jun-2011	0.76 ± 0.04	0.15	Nal_WBC	RE
EN00002	Adult	Male	29-Jun-2012	0.65 ± 0.07	0.30	Nal_WBC	RE
EN00002	Adult	Male	15-Aug-2012	0.47 ± 0.07	0.32	Nal_WBC	RE
EN00003	Adult	Male	14-Jan-2010	0.36 ± 0.04	0.16	Nal_WBC	RE
EN00003	Adult	Male	25-Jan-2010	0.35 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00003	Adult	Male	25-Jun-2010	0.30 ± 0.03	0.16	Nal_WBC	RE, Northern Is.
EN00003	Adult	Male	27-Aug-2010	0.63 ± 0.08	0.34	Nal_WBC	RE, Northern Is.
EN00003	Adult	Male	15-Sep-2010	0.65 ± 0.08	0.36	Nal_WBC	RE, Northern Is.
EN00003	Adult	Male	15-Mar-2011	0.61 ± 0.05	0.20	Nal_WBC	RE
EN00003	Adult	Male	30-Nov-2011	0.52 ± 0.08	0.34	Nal_WBC	RE
EN00003	Adult	Male	14-Dec-2012	0.39 ± 0.02	0.14	Nal_WBC	RE
EN00003	Adult	Male	14-Dec-2012	0.39 ± 0.02	0.14	Nal_WBC	RE
EN00004	Adult	Male	9-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00004	Adult	Male	2-Jun-2011	0.00	0.06	Nal_WBC	RE
EN00004	Adult	Male	13-Jun-2012	0.00	0.06	Nal_WBC	RE
EN00005	Adult	Male	25-Mar-2010	0.17 ± 0.02	0.11	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00005	Adult	Male	24-Aug-2010	0.15	± 0.05	0.23	Nal_WBC	RE
EN00005	Adult	Male	20-Sep-2010	0.12	± 0.03	0.14	Nal_WBC	RE
EN00005	Adult	Male	28-Oct-2010	0.13	± 0.03	0.12	Nal_WBC	RE
EN00005	Adult	Male	23-Mar-2011	0.22	± 0.04	0.17	Nal_WBC	RE
EN00005	Adult	Male	18-May-2011	0.33	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00005	Adult	Male	11-Jan-2012	0.12	± 0.01	0.14	Nal_WBC	RE
EN00005	Adult	Male	16-Apr-2012	0.18	± 0.01	0.13	Nal_WBC	RE
EN00005	Adult	Male	23-Jul-2012	0.27	± 0.02	0.14	Nal_WBC	RE
EN00005	Adult	Male	12-Sep-2012	0.20	± 0.01	0.13	Nal_WBC	RE
EN00005	Adult	Male	26-Oct-2012	0.11	± 0.01	0.13	Nal_WBC	RE
EN00006	Adult	Male	20-Jan-2010	0.32	± 0.04	0.17	Nal_WBC	RE
EN00006	Adult	Male	23-Feb-2010	0.19	± 0.03	0.14	Nal_WBC	RE
EN00006	Adult	Male	25-Mar-2010	0.13	± 0.03	0.16	Nal_WBC	RE
EN00006	Adult	Male	8-Sep-2011	0.00		0.11	Nal_WBC	RE
EN00006	Adult	Male	17-Apr-2012	0.19	± 0.01	0.13	Nal_WBC	RE
EN00006	Adult	Male	30-Jul-2012	0.31	± 0.02	0.14	Nal_WBC	RE
EN00006	Adult	Male	29-Nov-2012	0.34	± 0.02	0.13	Nal_WBC	RE
EN00007	Adult	Male	3-Nov-2010	0.03	± 0.02	0.08	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00007	Adult	Male	23-Mar-2011	0.08	± 0.02	0.11	Nal_WBC	RE
EN00007	Adult	Male	11-Jan-2012	0.05	± 0.01	0.13	Nal_WBC	RE
EN00007	Adult	Male	6-Feb-2012	0.07	± 0.01	0.13	Nal_WBC	RE
EN00007	Adult	Male	16-Apr-2012	0.00		0.06	Nal_WBC	RE
EN00007	Adult	Male	24-Jul-2012	0.16	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00007	Adult	Male	24-Oct-2012	0.17	± 0.01	0.12	Nal_WBC	RE, Northern Is.
EN00008	Adult	Male	6-Sep-2010	0.00		0.07	Nal_WBC	RE
EN00008	Adult	Male	23-Jun-2011	0.14	± 0.02	0.10	Nal_WBC	RE, Northern Is.
EN00008	Adult	Male	17-Apr-2012	0.00		0.06	Nal_WBC	RE
EN00008	Adult	Male	12-Jul-2012	0.17	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00008	Adult	Male	18-Oct-2012	0.06	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00009	Adult	Male	23-Feb-2010	0.00		0.06	Nal_WBC	RE
EN00009	Adult	Male	25-Mar-2010	0.00		0.06	Nal_WBC	RE
EN00009	Adult	Male	20-May-2010	0.00		0.06	Nal_WBC	RE
EN00009	Adult	Male	21-Jun-2010	0.08	± 0.02	0.09	Nal_WBC	RE
EN00009	Adult	Male	24-Aug-2010	0.15	± 0.03	0.12	Nal_WBC	RE
EN00009	Adult	Male	20-Sep-2010	0.10	± 0.02	0.10	Nal_WBC	RE
EN00009	Adult	Male	27-Oct-2010	0.06	± 0.02	0.10	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00009	Adult	Male	20-Apr-2011	0.36	± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00009	Adult	Male	19-Jan-2012	0.06	± 0.01	0.13	Nal_WBC	RE
EN00009	Adult	Male	4-Jul-2012	0.00		0.11	Nal_WBC	RE
EN00010	Adult	Male	20-Jan-2010	0.26	± 0.03	0.11	Nal_WBC	RE
EN00010	Adult	Male	26-Feb-2010	0.00		0.07	Nal_WBC	RE
EN00010	Adult	Male	25-Mar-2010	0.10	± 0.02	0.11	Nal_WBC	RE
EN00010	Adult	Male	20-May-2010	0.09	± 0.03	0.12	Nal_WBC	RE
EN00010	Adult	Male	22-Jun-2010	0.57	± 0.05	0.21	Nal_WBC	RE
EN00010	Adult	Male	24-Aug-2010	0.46	± 0.04	0.17	Nal_WBC	RE
EN00010	Adult	Male	20-Sep-2010	0.47	± 0.04	0.16	Nal_WBC	RE
EN00010	Adult	Male	30-Oct-2010	0.20	± 0.06	0.27	Nal_WBC	RE
EN00010	Adult	Male	24-Mar-2011	0.12	± 0.03	0.12	Nal_WBC	RE
EN00010	Adult	Male	19-May-2011	0.35	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00010	Adult	Male	28-Jun-2011	0.24	± 0.04	0.19	Nal_WBC	RE, Northern Is.
EN00010	Adult	Male	12-Jan-2012	0.14	± 0.01	0.14	Nal_WBC	RE
EN00010	Adult	Male	17-Apr-2012	0.12	± 0.01	0.13	Nal_WBC	RE
EN00010	Adult	Male	23-Jul-2012	0.24	± 0.01	0.13	Nal_WBC	RE
EN00010	Adult	Male	17-Sep-2012	0.11	± 0.01	0.13	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00010	Adult	Male	23-Oct-2012	0.20	± 0.01	0.13	Nal_WBC	RE
EN00010	Adult	Male	2-Dec-2012	0.16	± 0.01	0.13	Nal_WBC	RE
EN00011	Adult	Male	19-Jan-2010	0.12	± 0.03	0.15	Nal_WBC	RE
EN00011	Adult	Male	26-Feb-2010	0.19	± 0.04	0.20	Nal_WBC	RE
EN00011	Adult	Male	24-Mar-2010	0.08	± 0.04	0.17	Nal_WBC	RE
EN00011	Adult	Male	19-May-2010	0.13	± 0.03	0.12	Nal_WBC	RE
EN00011	Adult	Male	22-Jun-2010	0.18	± 0.03	0.14	Nal_WBC	RE
EN00011	Adult	Male	24-Aug-2010	0.23	± 0.04	0.16	Nal_WBC	RE
EN00011	Adult	Male	20-Sep-2010	0.25	± 0.04	0.16	Nal_WBC	RE
EN00011	Adult	Male	28-Oct-2010	0.17	± 0.03	0.12	Nal_WBC	RE
EN00011	Adult	Male	24-Mar-2011	0.20	± 0.04	0.17	Nal_WBC	RE
EN00011	Adult	Male	26-Jul-2012	0.17	± 0.01	0.13	Nal_WBC	RE
EN00011	Adult	Male	11-Sep-2012	0.07	± 0.01	0.13	Nal_WBC	RE
EN00011	Adult	Male	23-Oct-2012	0.16	± 0.01	0.13	Nal_WBC	RE
EN00013	Adult	Male	13-Mar-2010	0.00		0.10	Nal_WBC	RE
EN00013	Adult	Male	19-Apr-2011	0.19	± 0.03	0.12	Nal_WBC	RE, Northern Is.
EN00013	Adult	Male	13-Jul-2012	0.00		0.06	Nal_WBC	RE, Northern Is.
EN00013	Adult	Male	26-Jul-2012	0.09	± 0.01	0.13	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00013	Adult	Male	11-Sep-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00014	Adult	Male	10-Aug-2010	0.00	0.06	Nal_WBC	RE
EN00015	Adult	Male	24-Aug-2010	0.00	0.06	Nal_WBC	RE
EN00015	Adult	Male	20-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00015	Adult	Male	28-Oct-2010	0.00	0.06	Nal_WBC	RE
EN00015	Adult	Male	23-Mar-2011	0.00	0.06	Nal_WBC	RE
EN00015	Adult	Male	18-May-2011	0.07 ± 0.02	0.09	Nal_WBC	RE, Northern Is.
EN00015	Adult	Male	12-Jan-2012	0.00	2.05	Nal_WBC	RE
EN00015	Adult	Male	8-Feb-2012	0.00	0.06	Nal_WBC	RE
EN00015	Adult	Male	16-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00015	Adult	Male	23-Jul-2012	0.00	0.06	Nal_WBC	RE
EN00015	Adult	Male	12-Sep-2012	0.00	0.06	Nal_WBC	RE
EN00015	Adult	Male	23-Oct-2012	0.00	0.06	Nal_WBC	RE
EN00015	Adult	Male	2-Dec-2012	0.11 ± 0.01	0.12	Nal_WBC	RE
EN00018	Adult	Male	22-Jan-2010	0.00	0.06	Nal_WBC	RE
EN00018	Adult	Male	25-Feb-2010	0.00	0.06	Nal_WBC	RE
EN00018	Adult	Male	25-Mar-2010	0.04 ± 0.02	0.07	Nal_WBC	RE
EN00018	Adult	Male	20-May-2010	0.04 ± 0.02	0.08	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00018	Adult	Male	21-Jun-2010	0.04	± 0.02	0.09	Nal_WBC	RE
EN00018	Adult	Male	23-Oct-2010	0.07	± 0.03	0.16	Nal_WBC	RE
EN00018	Adult	Male	8-Aug-2011	0.00		0.10	Nal_WBC	RE
EN00018	Adult	Male	10-Jan-2012	0.00		0.06	Nal_WBC	RE
EN00018	Adult	Male	7-Feb-2012	0.00		0.06	Nal_WBC	RE
EN00018	Adult	Male	11-Sep-2012	0.00		0.06	Nal_WBC	RE
EN00018	Adult	Male	23-Oct-2012	0.00		0.06	Nal_WBC	RE
EN00019	Adult	Male	16-Sep-2010	0.36	± 0.04	0.17	Nal_WBC	RE
EN00021	Adult	Male	25-Feb-2010	0.10	± 0.03	0.13	Nal_WBC	RE
EN00021	Adult	Male	26-Mar-2010	0.10	± 0.02	0.10	Nal_WBC	RE
EN00021	Adult	Male	19-May-2010	0.24	± 0.04	0.18	Nal_WBC	RE
EN00021	Adult	Male	22-Jun-2010	0.20	± 0.04	0.18	Nal_WBC	RE
EN00021	Adult	Male	14-Sep-2010	0.47	± 0.07	0.30	Nal_WBC	RE
EN00021	Adult	Male	28-Oct-2010	0.22	± 0.03	0.15	Nal_WBC	RE
EN00021	Adult	Male	25-Mar-2011	1.07	± 0.05	0.34	Nal_WBC	RE, Northern Is.
EN00021	Adult	Male	17-Aug-2011	0.66	± 0.07	0.29	Nal_WBC	RE, Northern Is.
EN00022	Adult	Male	26-Mar-2010	0.04	± 0.02	0.10	Nal_WBC	RE
EN00022	Adult	Male	20-May-2010	0.05	± 0.02	0.11	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00022	Adult	Male	22-Jun-2010	0.08	± 0.04	0.16	Nal_WBC	RE
EN00022	Adult	Male	24-Aug-2010	0.40	± 0.04	0.16	Nal_WBC	RE
EN00022	Adult	Male	21-Sep-2010	0.19	± 0.03	0.13	Nal_WBC	RE
EN00022	Adult	Male	27-Oct-2010	0.20	± 0.03	0.12	Nal_WBC	RE
EN00022	Adult	Male	23-Mar-2011	0.14	± 0.03	0.12	Nal_WBC	RE
EN00022	Adult	Male	18-May-2011	0.13	± 0.04	0.19	Nal_WBC	RE, Northern Is.
EN00022	Adult	Male	28-Jun-2011	0.23	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00022	Adult	Male	11-Jan-2012	0.06	± 0.01	0.13	Nal_WBC	RE
EN00022	Adult	Male	6-Feb-2012	0.11	± 0.01	0.13	Nal_WBC	RE
EN00022	Adult	Male	18-Apr-2012	0.11	± 0.01	0.13	Nal_WBC	RE
EN00022	Adult	Male	12-Sep-2012	0.00		0.06	Nal_WBC	RE
EN00022	Adult	Male	23-Oct-2012	0.07	± 0.01	0.13	Nal_WBC	RE
EN00022	Adult	Male	2-Dec-2012	0.09	± 0.01	0.13	Nal_WBC	RE
EN00023	Adult	Male	20-Jan-2010	0.00		0.07	Nal_WBC	RE
EN00023	Adult	Male	23-Feb-2010	0.08	± 0.02	0.09	Nal_WBC	RE
EN00023	Adult	Male	24-Mar-2010	0.00		0.07	Nal_WBC	RE
EN00023	Adult	Male	19-May-2010	0.07	± 0.02	0.09	Nal_WBC	RE
EN00023	Adult	Male	22-Jun-2010	0.52	± 0.04	0.16	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00023	Adult	Male	29-Nov-2012	0.06 ± 0.01	0.13	Nal_WBC	RE
EN00024	Adult	Male	19-Jan-2010	0.00	0.07	Nal_WBC	RE, Northern Is.
EN00024	Adult	Male	23-Feb-2010	0.10 ± 0.03	0.11	Nal_WBC	RE, Northern Is.
EN00024	Adult	Male	24-Mar-2010	0.15 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00024	Adult	Male	20-May-2010	0.13 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00024	Adult	Male	22-Jun-2010	0.19 ± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN00024	Adult	Male	21-Sep-2010	0.26 ± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN00024	Adult	Male	23-Mar-2011	0.21 ± 0.04	0.16	Nal_WBC	RE
EN00024	Adult	Male	18-May-2011	0.15 ± 0.03	0.12	Nal_WBC	RE
EN00024	Adult	Male	28-Jun-2011	0.37 ± 0.03	0.15	Nal_WBC	RE
EN00024	Adult	Male	11-Jan-2012	0.15 ± 0.01	0.13	Nal_WBC	RE
EN00024	Adult	Male	6-Feb-2012	0.14 ± 0.01	0.13	Nal_WBC	RE
EN00024	Adult	Male	18-Apr-2012	0.18 ± 0.01	0.12	Nal_WBC	RE
EN00024	Adult	Male	26-Oct-2012	0.00	0.06	Nal_WBC	RE
EN00024	Adult	Male	4-Dec-2012	0.10 ± 0.01	0.13	Nal_WBC	RE
EN00027	Adult	Male	20-Jan-2010	0.00	0.06	Nal_WBC	RE
EN00027	Adult	Male	26-Mar-2010	0.08 ± 0.02	0.10	Nal_WBC	RE
EN00027	Adult	Male	20-May-2010	0.06 ± 0.02	0.09	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00027	Adult	Male	24-Aug-2010	0.22	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00027	Adult	Male	21-Sep-2010	0.14	± 0.03	0.12	Nal_WBC	RE, Northern Is.
EN00027	Adult	Male	28-Oct-2010	0.11	± 0.02	0.10	Nal_WBC	RE, Northern Is.
EN00027	Adult	Male	24-Mar-2011	0.04	± 0.02	0.09	Nal_WBC	RE, Northern Is.
EN00027	Adult	Male	19-May-2011	0.09	± 0.02	0.10	Nal_WBC	RE, Northern Is.
EN00027	Adult	Male	28-Jun-2011	0.08	± 0.02	0.10	Nal_WBC	RE, Northern Is.
EN00027	Adult	Male	23-Jan-2012	0.15	± 0.01	0.13	Nal_WBC	RE
EN00027	Adult	Male	17-Apr-2012	0.16	± 0.01	0.13	Nal_WBC	RE
EN00027	Adult	Male	24-Jul-2012	0.08	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00029	Adult	Male	5-Oct-2010	0.30	± 0.04	0.16	Nal_WBC	RE
EN00029	Adult	Male	26-Apr-2011	0.31	± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00029	Adult	Male	13-Jul-2012	0.18	± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00029	Adult	Male	10-Aug-2012	0.30	± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00030	Adult	Male	15-Apr-2010	0.00		0.06	Nal_WBC	RE, Northern Is.
EN00030	Adult	Male	30-Oct-2010	0.00		0.11	Nal_WBC	RE, Northern Is.
EN00030	Adult	Male	23-Jun-2011	0.42	± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00030	Adult	Male	18-Jul-2012	1.10	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00030	Adult	Male	17-Aug-2012	1.07	± 0.03	0.14	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00031	Adult	Male	11-Aug-2010	0.03 ± 0.02	0.08	Nal_WBC	RE
EN00032	Adult	Male	22-Jan-2010	0.00	0.06	Nal_WBC	RE
EN00032	Adult	Male	25-Feb-2010	0.04 ± 0.02	0.07	Nal_WBC	RE
EN00032	Adult	Male	25-Mar-2010	0.03 ± 0.02	0.08	Nal_WBC	RE
EN00032	Adult	Male	19-May-2010	0.04 ± 0.02	0.09	Nal_WBC	RE
EN00032	Adult	Male	22-Jun-2010	0.10 ± 0.02	0.10	Nal_WBC	RE
EN00032	Adult	Male	25-Aug-2010	0.09 ± 0.03	0.12	Nal_WBC	RE
EN00032	Adult	Male	21-Sep-2010	0.08 ± 0.02	0.11	Nal_WBC	RE
EN00032	Adult	Male	28-Oct-2010	0.09 ± 0.02	0.10	Nal_WBC	RE
EN00032	Adult	Male	24-Mar-2011	0.11 ± 0.02	0.11	Nal_WBC	RE, Northern Is.
EN00032	Adult	Male	19-May-2011	0.22 ± 0.03	0.16	Nal_WBC	RE, Northern Is.
EN00032	Adult	Male	30-Aug-2011	0.00	0.11	Nal_WBC	RE, Northern Is.
EN00032	Adult	Male	12-Jan-2012	0.00	0.06	Nal_WBC	RE
EN00032	Adult	Male	8-Feb-2012	0.06 ± 0.01	0.13	Nal_WBC	RE
EN00032	Adult	Male	17-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00032	Adult	Male	26-Jul-2012	0.09 ± 0.01	0.13	Nal_WBC	RE
EN00032	Adult	Male	12-Sep-2012	0.00	0.06	Nal_WBC	RE
EN00032	Adult	Male	24-Oct-2012	0.11 ± 0.01	0.13	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00032	Adult	Male	29-Nov-2012	0.00	0.06	Nal_WBC	RE
EN00034	Adult	Male	15-Feb-2010	0.30 ± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00034	Adult	Male	7-May-2010	0.28 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00034	Adult	Male	19-May-2010	0.40 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00034	Adult	Male	8-Jun-2010	0.44 ± 0.05	0.21	Nal_WBC	RE, Northern Is.
EN00034	Adult	Male	6-Nov-2010	0.48 ± 0.07	0.30	Nal_WBC	RE, Northern Is.
EN00034	Adult	Male	13-Jan-2011	0.16 ± 0.03	0.12	Nal_WBC	RE
EN00034	Adult	Male	24-Jun-2011	0.41 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00034	Adult	Male	13-Feb-2012	0.17 ± 0.01	0.13	Nal_WBC	RE
EN00034	Adult	Male	1-Oct-2012	0.20 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00035	Adult	Male	20-Jan-2010	0.00	0.06	Nal_WBC	RE
EN00035	Adult	Male	25-Mar-2010	0.03 ± 0.02	0.08	Nal_WBC	RE
EN00035	Adult	Male	20-May-2010	0.09 ± 0.02	0.09	Nal_WBC	RE
EN00035	Adult	Male	22-Jun-2010	0.22 ± 0.04	0.16	Nal_WBC	RE
EN00035	Adult	Male	25-Aug-2010	0.18 ± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN00035	Adult	Male	22-Sep-2010	0.14 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00035	Adult	Male	27-Oct-2010	0.18 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00035	Adult	Male	3-Mar-2011	0.44 ± 0.04	0.16	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00035	Adult	Male	23-Mar-2011	0.45	± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00035	Adult	Male	18-May-2011	0.42	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00035	Adult	Male	10-Jan-2012	0.34	± 0.02	0.13	Nal_WBC	RE
EN00035	Adult	Male	6-Feb-2012	0.30	± 0.02	0.13	Nal_WBC	RE
EN00035	Adult	Male	17-Apr-2012	0.26	± 0.01	0.13	Nal_WBC	RE
EN00035	Adult	Male	5-Jul-2012	0.18	± 0.05	0.25	Nal_WBC	RE
EN00035	Adult	Male	13-Sep-2012	0.11	± 0.01	0.13	Nal_WBC	RE
EN00035	Adult	Male	23-Oct-2012	0.21	± 0.01	0.13	Nal_WBC	RE
EN00035	Adult	Male	2-Dec-2012	0.12	± 0.01	0.13	Nal_WBC	RE
EN00036	Adult	Male	9-Sep-2010	0.04	± 0.02	0.10	Nal_WBC	RE
EN00036	Adult	Male	17-Jan-2011	0.39	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00037	Adult	Male	9-Sep-2011	0.00		0.11	Nal_WBC	RE
EN00037	Adult	Male	2-May-2012	0.37	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00038	Adult	Male	12-Oct-2010	0.12	± 0.03	0.14	Nal_WBC	RE
EN00038	Adult	Male	23-Oct-2012	0.00		0.06	Nal_WBC	RE
EN00039	Adult	Male	20-Jan-2010	0.00		0.07	Nal_WBC	RE
EN00039	Adult	Male	25-Feb-2010	0.11	± 0.03	0.14	Nal_WBC	RE
EN00039	Adult	Male	24-Mar-2010	0.09	± 0.02	0.10	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00039	Adult	Male	19-May-2010	0.21	± 0.04	0.17	Nal_WBC	RE
EN00039	Adult	Male	22-Jun-2010	0.22	± 0.03	0.15	Nal_WBC	RE
EN00039	Adult	Male	20-Sep-2010	0.47	± 0.04	0.18	Nal_WBC	RE
EN00039	Adult	Male	28-Oct-2010	0.27	± 0.03	0.16	Nal_WBC	RE
EN00039	Adult	Male	28-Jun-2011	0.76	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00039	Adult	Male	8-Aug-2011	0.67	± 0.07	0.31	Nal_WBC	RE, Northern Is.
EN00039	Adult	Male	10-Jan-2012	0.16	± 0.01	0.13	Nal_WBC	RE
EN00039	Adult	Male	6-Feb-2012	0.11	± 0.01	0.13	Nal_WBC	RE
EN00039	Adult	Male	16-Apr-2012	0.12	± 0.01	0.13	Nal_WBC	RE
EN00039	Adult	Male	11-Sep-2012	0.00		0.06	Nal_WBC	RE
EN00039	Adult	Male	23-Oct-2012	0.08	± 0.01	0.13	Nal_WBC	RE
EN00039	Adult	Male	29-Nov-2012	0.09	± 0.01	0.13	Nal_WBC	RE
EN00041	Adult	Male	12-Mar-2010	0.00		0.06	Nal_WBC	RE
EN00041	Adult	Male	28-Aug-2010	0.00		0.11	Nal_WBC	RE
EN00041	Adult	Male	11-Aug-2011	0.00		0.11	Nal_WBC	RE
EN00041	Adult	Male	19-Apr-2012	0.10	± 0.01	0.13	Nal_WBC	RE
EN00041	Adult	Male	14-Jun-2012	0.11	± 0.01	0.14	Nal_WBC	RE
EN00042	Adult	Male	9-Aug-2010	0.39	± 0.04	0.18	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00042	Adult	Male	8-Jul-2011	0.73	± 0.05	0.22	Nal_WBC	RE, Northern Is.
EN00042	Adult	Male	26-Jul-2011	0.56	± 0.08	0.34	Nal_WBC	RE, Northern Is.
EN00042	Adult	Male	8-Aug-2011	0.70	± 0.08	0.35	Nal_WBC	RE, Northern Is.
EN00042	Adult	Male	20-Jan-2012	0.16	± 0.01	0.13	Nal_WBC	RE
EN00042	Adult	Male	14-Jun-2012	0.31	± 0.02	0.14	Nal_WBC	RE
EN00042	Adult	Male	6-Aug-2012	1.05	± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00043	Adult	Male	20-Jan-2010	0.00		0.07	Nal_WBC	RE
EN00043	Adult	Male	26-Mar-2010	0.27	± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN00043	Adult	Male	19-May-2010	0.19	± 0.03	0.11	Nal_WBC	RE, Northern Is.
EN00043	Adult	Male	23-Jun-2010	0.38	± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00043	Adult	Male	24-Aug-2010	0.53	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00043	Adult	Male	23-Sep-2010	0.21	± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN00043	Adult	Male	27-Oct-2010	0.23	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00043	Adult	Male	23-Mar-2011	0.28	± 0.04	0.16	Nal_WBC	RE
EN00043	Adult	Male	30-Aug-2011	0.00		0.11	Nal_WBC	RE
EN00043	Adult	Male	11-Jan-2012	0.11	± 0.01	0.13	Nal_WBC	RE
EN00043	Adult	Male	8-Feb-2012	0.10	± 0.01	0.13	Nal_WBC	RE
EN00043	Adult	Male	18-Apr-2012	0.14	± 0.01	0.13	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00043	Adult	Male	30-Jul-2012	0.13 ± 0.01	0.13	Nal_WBC	RE
EN00043	Adult	Male	16-Oct-2012	0.00	0.06	Nal_WBC	RE
EN00043	Adult	Male	26-Oct-2012	0.12 ± 0.01	0.13	Nal_WBC	RE
EN00043	Adult	Male	4-Dec-2012	0.08 ± 0.01	0.13	Nal_WBC	RE
EN00044	Adult	Male	9-Apr-2010	0.09 ± 0.03	0.12	Nal_WBC	RE
EN00044	Adult	Male	13-May-2010	0.52 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00044	Adult	Male	29-Oct-2010	0.17 ± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00044	Adult	Male	28-Mar-2011	0.14 ± 0.02	0.11	Nal_WBC	RE, Northern Is.
EN00044	Adult	Male	3-Aug-2011	0.00	0.11	Nal_WBC	RE, Northern Is.
EN00044	Adult	Male	23-Mar-2012	0.00	0.06	Nal_WBC	RE
EN00044	Adult	Male	11-May-2012	0.65 ± 0.02	0.14	Nal_WBC	RE
EN00044	Adult	Male	11-Jul-2012	0.55 ± 0.07	0.33	Nal_WBC	RE
EN00044	Adult	Male	9-Oct-2012	0.51 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00046	Adult	Male	22-Jan-2010	0.05 ± 0.03	0.12	Nal_WBC	RE, Northern Is.
EN00046	Adult	Male	1-Apr-2011	0.72 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00046	Adult	Male	11-Dec-2012	0.13 ± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00047	Adult	Male	25-Feb-2010	0.00	0.06	Nal_WBC	RE
EN00047	Adult	Male	26-Mar-2010	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00047	Adult	Male	21-May-2010	0.12	± 0.03	0.12	Nal_WBC	RE
EN00047	Adult	Male	23-Jun-2010	0.31	± 0.03	0.14	Nal_WBC	RE
EN00047	Adult	Male	25-Aug-2010	0.33	± 0.03	0.12	Nal_WBC	RE
EN00047	Adult	Male	20-Sep-2010	0.48	± 0.04	0.19	Nal_WBC	RE
EN00047	Adult	Male	1-Nov-2010	0.41	± 0.03	0.14	Nal_WBC	RE
EN00047	Adult	Male	24-Mar-2011	0.37	± 0.05	0.21	Nal_WBC	RE
EN00047	Adult	Male	28-Jun-2011	0.41	± 0.04	0.17	Nal_WBC	RE
EN00047	Adult	Male	11-Jan-2012	0.17	± 0.01	0.13	Nal_WBC	RE
EN00047	Adult	Male	6-Feb-2012	0.17	± 0.01	0.13	Nal_WBC	RE
EN00047	Adult	Male	17-Sep-2012	0.00		0.06	Nal_WBC	RE
EN00047	Adult	Male	24-Oct-2012	0.00		0.06	Nal_WBC	RE
EN00049	Adult	Male	4-Oct-2010	0.10	± 0.03	0.12	Nal_WBC	RE
EN00049	Adult	Male	17-Jun-2011	0.03	± 0.02	0.08	Nal_WBC	RE
EN00049	Adult	Male	29-Sep-2011	0.00		0.11	Nal_WBC	RE
EN00051	Adult	Male	16-Mar-2010	0.12	± 0.03	0.12	Nal_WBC	RE, Northern Is.
EN00051	Adult	Male	13-Apr-2010	0.11	± 0.02	0.11	Nal_WBC	RE, Northern Is.
EN00051	Adult	Male	3-Jun-2010	0.06	± 0.02	0.10	Nal_WBC	RE, Northern Is.
EN00051	Adult	Male	15-Jan-2011	0.77	± 0.04	0.18	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00051	Adult	Male	18-Mar-2011	1.04	± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00051	Adult	Male	31-May-2011	0.73	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00051	Adult	Male	24-Jun-2011	0.79	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00051	Adult	Male	25-Jun-2012	0.31	± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00051	Adult	Male	17-Aug-2012	0.27	± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00052	Adult	Male	11-Jun-2011	0.00		0.10	Nal_WBC	NR
EN00054	Adult	Male	23-Sep-2010	0.30	± 0.07	0.32	Nal_WBC	RE
EN00054	Adult	Male	16-Aug-2011	0.00		0.12	Nal_WBC	RE
EN00054	Adult	Male	13-Jun-2012	0.14	± 0.01	0.14	Nal_WBC	RE
EN00057	Adult	Male	26-Aug-2011	0.00		0.11	Nal_WBC	RE
EN00057	Adult	Male	9-Feb-2012	0.19	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00057	Adult	Male	10-May-2012	0.44	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00057	Adult	Male	9-Jul-2012	0.30	± 0.06	0.30	Nal_WBC	RE, Northern Is.
EN00059	Adult	Male	25-Feb-2010	0.05	± 0.02	0.08	Nal_WBC	RE
EN00059	Adult	Male	26-Mar-2010	0.00		0.06	Nal_WBC	RE
EN00059	Adult	Male	21-May-2010	0.00		0.06	Nal_WBC	RE
EN00059	Adult	Male	21-Jun-2010	0.11	± 0.02	0.09	Nal_WBC	RE
EN00059	Adult	Male	25-Aug-2010	0.15	± 0.03	0.15	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00059	Adult	Male	21-Sep-2010	0.00	0.07	Nal_WBC	RE
EN00059	Adult	Male	1-Nov-2010	0.10 ± 0.02	0.10	Nal_WBC	RE
EN00059	Adult	Male	24-Mar-2011	0.00	0.07	Nal_WBC	RE
EN00059	Adult	Male	28-Jun-2011	0.20 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00059	Adult	Male	17-Apr-2012	0.23 ± 0.01	0.13	Nal_WBC	RE
EN00059	Adult	Male	24-Jul-2012	0.38 ± 0.02	0.13	Nal_WBC	RE
EN00059	Adult	Male	13-Sep-2012	0.15 ± 0.01	0.13	Nal_WBC	RE
EN00059	Adult	Male	29-Nov-2012	0.16 ± 0.01	0.13	Nal_WBC	RE
EN00060	Adult	Male	13-Jan-2010	0.19 ± 0.02	0.10	Nal_WBC	RE, Northern Is.
EN00060	Adult	Male	9-Apr-2010	0.00	0.07	Nal_WBC	RE, Northern Is.
EN00060	Adult	Male	3-Mar-2011	0.68 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00060	Adult	Male	18-Apr-2011	0.67 ± 0.05	0.20	Nal_WBC	RE, Northern Is.
EN00060	Adult	Male	26-Mar-2012	0.16 ± 0.01	0.13	Nal_WBC	RE
EN00060	Adult	Male	11-Jul-2012	0.15 ± 0.04	0.18	Nal_WBC	RE
EN00061	Adult	Female	16-Feb-2012	0.00	0.06	Nal_WBC	RE
EN00062	Adult	Female	2-Sep-2010	0.05 ± 0.02	0.09	Nal_WBC	RE
EN00062	Adult	Female	3-Aug-2012	0.09 ± 0.01	0.13	Nal_WBC	RE
EN00065	Adult	Male	20-Feb-2010	0.00	0.11	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00065	Adult	Male	20-Feb-2012	0.31	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00065	Adult	Male	27-Mar-2012	0.26	± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00065	Adult	Male	2-May-2012	0.76	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00065	Adult	Male	13-Aug-2012	1.01	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00066	Adult	Female	17-Sep-2010	0.00		0.06	Nal_WBC	RE
EN00066	Adult	Female	25-May-2011	0.07	± 0.02	0.09	Nal_WBC	RE
EN00066	Adult	Female	25-Oct-2012	0.00		0.06	Nal_WBC	RE
EN00068	Adult	Male	27-Mar-2012	0.12	± 0.01	0.14	Nal_WBC	RE
EN00069	Adult	Male	19-Feb-2010	0.06	± 0.02	0.08	Nal_WBC	RE, Northern Is.
EN00069	Adult	Male	9-Apr-2010	0.05	± 0.02	0.08	Nal_WBC	RE, Northern Is.
EN00069	Adult	Male	23-Mar-2011	0.21	± 0.03	0.14	Nal_WBC	RE
EN00069	Adult	Male	28-May-2011	0.13	± 0.06	0.26	Nal_WBC	RE
EN00069	Adult	Male	6-Feb-2012	0.07	± 0.01	0.13	Nal_WBC	RE
EN00069	Adult	Male	17-Apr-2012	0.00		0.06	Nal_WBC	RE
EN00069	Adult	Male	24-Jul-2012	0.15	± 0.01	0.13	Nal_WBC	RE
EN00069	Adult	Male	12-Sep-2012	0.07	± 0.01	0.13	Nal_WBC	RE
EN00070	Adult	Male	26-Mar-2010	0.12	± 0.02	0.10	Nal_WBC	RE
EN00070	Adult	Male	21-May-2010	0.07	± 0.02	0.10	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00070	Adult	Male	21-Jun-2010	0.09 ± 0.03	0.12	Nal_WBC	RE
EN00070	Adult	Male	24-Aug-2010	0.12 ± 0.03	0.15	Nal_WBC	RE
EN00070	Adult	Male	21-Sep-2010	0.00	0.07	Nal_WBC	RE
EN00070	Adult	Male	23-Mar-2011	0.11 ± 0.02	0.11	Nal_WBC	RE
EN00070	Adult	Male	18-May-2011	0.20 ± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN00070	Adult	Male	11-Jun-2011	0.00	0.12	Nal_WBC	RE, Northern Is.
EN00070	Adult	Male	11-Jan-2012	0.07 ± 0.01	0.13	Nal_WBC	RE
EN00070	Adult	Male	8-Feb-2012	0.10 ± 0.01	0.13	Nal_WBC	RE
EN00070	Adult	Male	19-Apr-2012	0.09 ± 0.01	0.13	Nal_WBC	RE
EN00070	Adult	Male	23-Jul-2012	0.21 ± 0.01	0.13	Nal_WBC	RE
EN00071	Adult	Male	8-Feb-2010	0.00	0.06	Nal_WBC	RE
EN00071	Adult	Male	7-Feb-2012	0.09 ± 0.01	0.13	Nal_WBC	RE
EN00073	Adult	Female	17-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00073	Adult	Female	15-Sep-2011	0.00	0.10	Nal_WBC	RE
EN00073	Adult	Female	10-Jul-2012	0.00	0.11	Nal_WBC	RE
EN00074	Adult	Female	4-Jun-2010	0.00	0.06	Nal_WBC	RE
EN00076	Adult	Male	27-Jan-2010	0.00	0.06	Nal_WBC	RE
EN00076	Adult	Male	10-Apr-2010	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00076	Adult	Male	22-Mar-2011	0.37	± 0.04	0.20	Nal_WBC	RE, Northern Is.
EN00076	Adult	Male	19-Apr-2011	0.46	± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00076	Adult	Male	9-Sep-2011	0.32	± 0.07	0.31	Nal_WBC	RE, Northern Is.
EN00076	Adult	Male	22-Jun-2012	0.13	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00077	Adult	Female	16-Sep-2010	0.00		0.06	Nal_WBC	RE
EN00078	Adult	Female	15-Jun-2011	0.00		0.06	Nal_WBC	RE
EN00078	Adult	Female	5-Dec-2012	0.00		0.06	Nal_WBC	RE
EN00080	Adult	Male	9-Jun-2010	0.07	± 0.02	0.09	Nal_WBC	RE
EN00080	Adult	Male	28-May-2011	0.00		0.11	Nal_WBC	RE
EN00080	Adult	Male	27-Jan-2012	0.00		0.06	Nal_WBC	RE
EN00081	Adult	Male	17-Sep-2010	0.18	± 0.03	0.14	Nal_WBC	RE
EN00081	Adult	Male	8-Nov-2010	0.26	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00081	Adult	Male	24-Mar-2011	0.08	± 0.02	0.10	Nal_WBC	RE
EN00081	Adult	Male	18-May-2011	0.20	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00081	Adult	Male	11-Jan-2012	0.13	± 0.01	0.13	Nal_WBC	RE
EN00081	Adult	Male	8-Feb-2012	0.12	± 0.01	0.13	Nal_WBC	RE
EN00081	Adult	Male	17-Apr-2012	0.00		0.06	Nal_WBC	RE
EN00081	Adult	Male	24-Jul-2012	0.21	± 0.01	0.13	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00081	Adult	Male	12-Sep-2012	0.17	± 0.01	0.13	Nal_WBC	RE
EN00081	Adult	Male	11-Oct-2012	0.24	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00081	Adult	Male	2-Dec-2012	0.19	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00083	Adult	Male	17-Sep-2010	0.17	± 0.04	0.18	Nal_WBC	RE
EN00083	Adult	Male	1-Mar-2011	1.52	± 0.07	0.24	Nal_WBC	RE, Northern Is.
EN00083	Adult	Male	31-May-2011	0.74	± 0.05	0.18	Nal_WBC	RE, Northern Is.
EN00083	Adult	Male	13-Feb-2012	0.29	± 0.02	0.14	Nal_WBC	RE
EN00083	Adult	Male	16-Apr-2012	0.18	± 0.01	0.14	Nal_WBC	RE
EN00083	Adult	Male	26-Jul-2012	0.11	± 0.01	0.14	Nal_WBC	RE
EN00083	Adult	Male	24-Oct-2012	0.00		0.06	Nal_WBC	RE
EN00084	Adult	Male	20-Jan-2010	0.07	± 0.02	0.10	Nal_WBC	RE
EN00084	Adult	Male	25-Feb-2010	0.11	± 0.03	0.12	Nal_WBC	RE
EN00084	Adult	Male	25-Mar-2010	0.09	± 0.02	0.11	Nal_WBC	RE
EN00084	Adult	Male	21-May-2010	0.00		0.07	Nal_WBC	RE
EN00084	Adult	Male	22-Jun-2010	0.13	± 0.03	0.13	Nal_WBC	RE
EN00084	Adult	Male	24-Aug-2010	0.29	± 0.04	0.16	Nal_WBC	RE
EN00084	Adult	Male	24-Aug-2010	0.31	± 0.03	0.14	Nal_WBC	RE
EN00084	Adult	Male	21-Sep-2010	0.21	± 0.04	0.19	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00084	Adult	Male	28-Oct-2010	0.16	± 0.03	0.12	Nal_WBC	RE
EN00084	Adult	Male	23-Mar-2011	0.23	± 0.04	0.17	Nal_WBC	RE
EN00084	Adult	Male	18-May-2011	0.32	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00084	Adult	Male	28-Jun-2011	0.29	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00084	Adult	Male	6-Feb-2012	0.18	± 0.01	0.14	Nal_WBC	RE
EN00084	Adult	Male	16-Apr-2012	0.14	± 0.01	0.13	Nal_WBC	RE
EN00084	Adult	Male	13-Jul-2012	0.00		0.11	Nal_WBC	RE, Northern Is.
EN00084	Adult	Male	12-Sep-2012	0.08	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00084	Adult	Male	23-Oct-2012	0.05	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00084	Adult	Male	30-Nov-2012	0.07	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00086	Adult	Male	11-Mar-2010	0.63	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00086	Adult	Male	7-Apr-2010	0.61	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00086	Adult	Male	21-Jun-2010	0.65	± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00086	Adult	Male	23-Jul-2010	0.72	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00086	Adult	Male	1-Aug-2011	0.00		0.12	Nal_WBC	RE, Northern Is.
EN00086	Adult	Male	30-Jan-2012	0.61	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00086	Adult	Male	28-Mar-2012	0.37	± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00086	Adult	Male	7-May-2012	0.46	± 0.02	0.13	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00086	Adult	Male	4-Jul-2012	0.59	± 0.08	0.35	Nal_WBC	RE, Northern Is.
EN00086	Adult	Male	29-Oct-2012	0.32	± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00088	Adult	Male	27-Aug-2010	0.06	± 0.02	0.09	Nal_WBC	RE
EN00088	Adult	Male	28-May-2011	0.00		0.11	Nal_WBC	RE
EN00094	Adult	Male	7-Apr-2010	0.12	± 0.03	0.13	Nal_WBC	RE
EN00094	Adult	Male	30-Jul-2010	0.76	± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00094	Adult	Male	8-Aug-2011	0.55	± 0.07	0.32	Nal_WBC	RE
EN00094	Adult	Male	14-Feb-2012	0.40	± 0.02	0.14	Nal_WBC	RE
EN00094	Adult	Male	28-Jun-2012	0.34	± 0.02	0.14	Nal_WBC	RE
EN00094	Adult	Male	12-Nov-2012	0.61	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00095	Adult	Male	14-Apr-2010	0.00		0.06	Nal_WBC	RE
EN00095	Adult	Male	25-Oct-2010	0.00		0.11	Nal_WBC	RE
EN00095	Adult	Male	7-Jan-2011	0.07	± 0.03	0.16	Nal_WBC	RE
EN00095	Adult	Male	10-Feb-2012	0.09	± 0.01	0.13	Nal_WBC	RE
EN00095	Adult	Male	18-Jun-2012	0.00		0.11	Nal_WBC	RE
EN00095	Adult	Male	14-Dec-2012	0.05	± 0.01	0.13	Nal_WBC	RE
EN00097	Adult	Male	29-Mar-2010	0.00		0.06	Nal_WBC	RE
EN00097	Adult	Male	22-Mar-2011	0.39	± 0.04	0.17	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00097	Adult	Male	12-May-2011	0.34	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00097	Adult	Male	18-Jun-2011	0.43	± 0.07	0.33	Nal_WBC	RE, Northern Is.
EN00098	Adult	Male	22-Jan-2010	0.00		0.07	Nal_WBC	RE, Northern Is.
EN00098	Adult	Male	15-Mar-2011	0.23	± 0.03	0.16	Nal_WBC	RE
EN00098	Adult	Male	10-Jul-2012	0.00		0.07	Nal_WBC	RE
EN00099	Adult	Male	22-Jan-2010	0.00		0.06	Nal_WBC	RE
EN00099	Adult	Male	25-Feb-2010	0.06	± 0.02	0.09	Nal_WBC	RE
EN00099	Adult	Male	25-Mar-2010	0.06	± 0.02	0.11	Nal_WBC	RE
EN00099	Adult	Male	21-May-2010	0.00		0.07	Nal_WBC	RE
EN00099	Adult	Male	23-Jun-2010	0.17	± 0.03	0.12	Nal_WBC	RE
EN00099	Adult	Male	24-Aug-2010	0.17	± 0.03	0.15	Nal_WBC	RE
EN00099	Adult	Male	21-Sep-2010	0.17	± 0.02	0.11	Nal_WBC	RE
EN00099	Adult	Male	28-Oct-2010	0.16	± 0.03	0.11	Nal_WBC	RE
EN00099	Adult	Male	23-Mar-2011	0.27	± 0.03	0.15	Nal_WBC	RE
EN00099	Adult	Male	28-Jun-2011	0.25	± 0.03	0.15	Nal_WBC	RE
EN00099	Adult	Male	26-Jul-2011	0.52	± 0.07	0.30	Nal_WBC	RE
EN00099	Adult	Male	8-Feb-2012	0.21	± 0.01	0.14	Nal_WBC	RE
EN00099	Adult	Male	16-Apr-2012	0.16	± 0.01	0.14	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00099	Adult	Male	24-Jul-2012	0.19	± 0.01	0.13	Nal_WBC	RE
EN00099	Adult	Male	12-Sep-2012	0.18	± 0.01	0.13	Nal_WBC	RE
EN00099	Adult	Male	4-Dec-2012	0.15	± 0.01	0.13	Nal_WBC	RE
EN00100	Adult	Male	7-Jul-2011	0.61	± 0.04	0.15	Nal_WBC	RE
EN00100	Adult	Male	8-Aug-2011	0.59	± 0.07	0.30	Nal_WBC	RE
EN00100	Adult	Male	27-Sep-2011	0.36	± 0.08	0.36	Nal_WBC	RE
EN00101	Adult	Male	20-Feb-2010	0.00		0.11	Nal_WBC	RE
EN00101	Adult	Male	6-Sep-2010	0.03	± 0.02	0.08	Nal_WBC	RE
EN00101	Adult	Male	23-Oct-2010	0.00		0.11	Nal_WBC	RE
EN00104	Adult	Male	16-Sep-2010	0.07	± 0.02	0.11	Nal_WBC	RE
EN00104	Adult	Male	11-May-2012	0.51	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00108	Adult	Male	28-Sep-2010	0.51	± 0.04	0.18	Nal_WBC	RE
EN00108	Adult	Male	11-Apr-2011	0.48	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00108	Adult	Male	22-May-2012	0.49	± 0.02	0.14	Nal_WBC	RE
EN00110	Adult	Male	1-Mar-2011	0.06	± 0.02	0.11	Nal_WBC	RE, Northern Is.
EN00110	Adult	Male	23-Mar-2011	0.00		0.06	Nal_WBC	RE, Northern Is.
EN00110	Adult	Male	8-Jul-2011	1.08	± 0.05	0.18	Nal_WBC	RE, Northern Is.
EN00110	Adult	Male	11-Jan-2012	0.26	± 0.01	0.14	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00110	Adult	Male	8-Feb-2012	0.26	± 0.01	0.13	Nal_WBC	RE
EN00110	Adult	Male	17-Apr-2012	0.16	± 0.01	0.13	Nal_WBC	RE
EN00110	Adult	Male	24-Jul-2012	0.20	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00110	Adult	Male	11-Sep-2012	0.16	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00110	Adult	Male	23-Oct-2012	0.14	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00110	Adult	Male	2-Dec-2012	0.07	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00113	Adult	Male	18-Feb-2010	0.00		0.06	Nal_WBC	RE
EN00113	Adult	Male	8-Jun-2010	0.08	± 0.02	0.11	Nal_WBC	RE, Northern Is.
EN00113	Adult	Male	1-Mar-2011	0.72	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00116	Adult	Male	29-Jan-2010	0.00		0.07	Nal_WBC	RE
EN00116	Adult	Male	8-Apr-2010	0.06	± 0.03	0.13	Nal_WBC	RE
EN00116	Adult	Male	10-May-2010	0.14	± 0.03	0.11	Nal_WBC	RE, Northern Is.
EN00116	Adult	Male	18-Apr-2011	0.78	± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00117	Adult	Male	29-Sep-2010	0.00		0.11	Nal_WBC	NR
EN00117	Adult	Male	9-Aug-2011	0.00		0.11	Nal_WBC	RE
EN00119	Adult	Male	25-Aug-2010	0.25	± 0.03	0.15	Nal_WBC	RE
EN00119	Adult	Male	20-Sep-2010	0.42	± 0.04	0.18	Nal_WBC	RE
EN00119	Adult	Male	27-Oct-2010	0.22	± 0.04	0.17	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00119	Adult	Male	2-Jul-2011	0.11 ± 0.04	0.16	Nal_WBC	RE
EN00119	Adult	Male	1-Oct-2011	0.00	0.11	Nal_WBC	ER, Rng
EN00119	Adult	Male	11-Jan-2012	0.12 ± 0.01	0.13	Nal_WBC	RE
EN00119	Adult	Male	8-Feb-2012	0.11 ± 0.01	0.13	Nal_WBC	RE
EN00119	Adult	Male	18-Apr-2012	0.15 ± 0.01	0.13	Nal_WBC	RE
EN00119	Adult	Male	24-Jul-2012	0.19 ± 0.01	0.13	Nal_WBC	RE
EN00119	Adult	Male	13-Sep-2012	0.16 ± 0.01	0.13	Nal_WBC	RE
EN00119	Adult	Male	23-Oct-2012	0.18 ± 0.01	0.13	Nal_WBC	RE
EN00119	Adult	Male	29-Nov-2012	0.15 ± 0.01	0.13	Nal_WBC	RE
EN00120	Adult	Male	12-Aug-2010	0.21 ± 0.04	0.19	Nal_WBC	RE, Northern Is.
EN00120	Adult	Male	20-Apr-2011	0.75 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00120	Adult	Male	21-Feb-2012	0.67 ± 0.02	0.14	Nal_WBC	RE
EN00120	Adult	Male	15-Oct-2012	0.06 ± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00122	Adult	Male	19-Jan-2010	0.00	0.07	Nal_WBC	RE
EN00122	Adult	Male	8-Jun-2010	0.41 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00122	Adult	Male	25-Jan-2012	0.26 ± 0.01	0.14	Nal_WBC	RE
EN00122	Adult	Male	26-Apr-2012	0.96 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00122	Adult	Male	9-May-2012	3.41 ± 0.10	0.18	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00122	Adult	Male	27-Jun-2012	2.16	± 0.06	0.16	Nal_WBC	RE, Northern Is.
EN00122	Adult	Male	10-Sep-2012	1.47	± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00123	Adult	Male	27-Sep-2010	0.00		0.11	Nal_WBC	ER
EN00126	Adult	Male	9-Aug-2010	0.24	± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN00131	Adult	Male	13-Apr-2010	0.11	± 0.03	0.13	Nal_WBC	RE
EN00135	Adult	Male	26-Sep-2011	0.00		0.11	Nal_WBC	RE
EN00136	Adult	Male	12-Aug-2010	0.33	± 0.04	0.16	Nal_WBC	RE
EN00136	Adult	Male	22-Mar-2011	0.48	± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00136	Adult	Male	11-Jun-2011	0.22	± 0.05	0.23	Nal_WBC	RE, Northern Is.
EN00136	Adult	Male	21-Mar-2012	0.06	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00139	Adult	Male	20-Jan-2010	0.00		0.07	Nal_WBC	RE
EN00139	Adult	Male	26-Feb-2010	0.00		0.06	Nal_WBC	RE
EN00139	Adult	Male	25-Mar-2010	0.07	± 0.02	0.10	Nal_WBC	RE
EN00139	Adult	Male	19-May-2010	0.00		0.07	Nal_WBC	RE
EN00139	Adult	Male	22-Jun-2010	0.07	± 0.02	0.10	Nal_WBC	RE
EN00139	Adult	Male	7-Aug-2010	0.15	± 0.05	0.21	Nal_WBC	RE
EN00140	Adult	Male	10-May-2010	0.21	± 0.03	0.11	Nal_WBC	RE, Northern Is.
EN00140	Adult	Male	17-May-2010	0.29	± 0.05	0.21	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00140	Adult	Male	27-Jul-2010	0.25	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00140	Adult	Male	20-Apr-2011	0.53	± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00140	Adult	Male	17-May-2011	0.44	± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00140	Adult	Male	3-Jun-2011	0.73	± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00140	Adult	Male	14-Jul-2011	0.83	± 0.05	0.18	Nal_WBC	RE, Northern Is.
EN00140	Adult	Male	19-Mar-2012	0.28	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00141	Adult	Male	14-Aug-2010	0.57	± 0.08	0.35	Nal_WBC	RE
EN00141	Adult	Male	1-Nov-2010	0.36	± 0.04	0.17	Nal_WBC	RE
EN00141	Adult	Male	27-Sep-2011	0.00		0.11	Nal_WBC	RE
EN00141	Adult	Male	30-Apr-2012	0.18	± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00141	Adult	Male	22-Jun-2012	0.21	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00141	Adult	Male	2-Aug-2012	0.14	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00141	Adult	Male	16-Oct-2012	0.10	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00142	Adult	Male	2-Feb-2012	0.07	± 0.01	0.13	Nal_WBC	RE
EN00143	Adult	Male	19-Jan-2010	0.05	± 0.02	0.11	Nal_WBC	RE
EN00143	Adult	Male	25-Feb-2010	0.05	± 0.02	0.09	Nal_WBC	RE
EN00143	Adult	Male	25-Mar-2010	0.06	± 0.02	0.09	Nal_WBC	RE
EN00143	Adult	Male	19-May-2010	0.06	± 0.02	0.08	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00143	Adult	Male	22-Jun-2010	0.06	± 0.02	0.09	Nal_WBC	RE
EN00143	Adult	Male	24-Aug-2010	0.15	± 0.03	0.13	Nal_WBC	RE
EN00143	Adult	Male	21-Sep-2010	0.09	± 0.02	0.11	Nal_WBC	RE
EN00143	Adult	Male	27-Oct-2010	0.06	± 0.02	0.11	Nal_WBC	RE
EN00143	Adult	Male	23-Mar-2011	0.09	± 0.02	0.09	Nal_WBC	RE
EN00143	Adult	Male	18-May-2011	0.14	± 0.03	0.11	Nal_WBC	RE, Northern Is.
EN00143	Adult	Male	28-Jun-2011	0.12	± 0.02	0.11	Nal_WBC	RE, Northern Is.
EN00143	Adult	Male	10-Jan-2012	0.14	± 0.01	0.12	Nal_WBC	RE
EN00143	Adult	Male	6-Feb-2012	0.07	± 0.01	0.14	Nal_WBC	RE
EN00143	Adult	Male	16-Apr-2012	0.00		0.06	Nal_WBC	RE
EN00143	Adult	Male	30-Jul-2012	0.08	± 0.01	0.13	Nal_WBC	RE
EN00143	Adult	Male	17-Sep-2012	0.00		0.06	Nal_WBC	RE
EN00143	Adult	Male	23-Oct-2012	0.06	± 0.01	0.13	Nal_WBC	RE
EN00143	Adult	Male	30-Nov-2012	0.11	± 0.01	0.13	Nal_WBC	RE
EN00147	Adult	Male	6-Sep-2010	0.24	± 0.03	0.11	Nal_WBC	RE
EN00147	Adult	Male	10-May-2012	1.03	± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00148	Adult	Male	27-Jan-2012	0.14	± 0.01	0.13	Nal_WBC	RE
EN00151	Adult	Male	26-Jun-2012	0.00		0.11	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00159	Adult	Male	13-Apr-2010	0.07	± 0.02	0.10	Nal_WBC	RE
EN00161	Adult	Male	12-Apr-2010	0.07	± 0.02	0.10	Nal_WBC	RE
EN00161	Adult	Male	20-Jul-2010	0.17	± 0.04	0.18	Nal_WBC	RE
EN00161	Adult	Male	1-Nov-2010	0.47	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00161	Adult	Male	15-Jan-2011	0.87	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00161	Adult	Male	1-Mar-2011	1.25	± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00161	Adult	Male	19-Apr-2011	0.79	± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00161	Adult	Male	31-May-2011	0.74	± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00161	Adult	Male	5-Jul-2012	0.08	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00168	Adult	Male	19-Mar-2010	0.00		0.06	Nal_WBC	RE
EN00168	Adult	Male	24-May-2010	0.00		0.06	Nal_WBC	RE
EN00171	Adult	Male	12-Feb-2010	0.00		0.06	Nal_WBC	RE
EN00172	Adult	Male	6-Aug-2012	0.21	± 0.01	0.13	Nal_WBC	RE
EN00175	Adult	Male	23-Jun-2010	0.35	± 0.04	0.18	Nal_WBC	RE
EN00175	Adult	Male	24-Aug-2010	0.36	± 0.04	0.18	Nal_WBC	RE
EN00175	Adult	Male	29-Oct-2010	0.19	± 0.03	0.14	Nal_WBC	RE
EN00175	Adult	Male	24-Mar-2011	0.17	± 0.03	0.15	Nal_WBC	RE
EN00175	Adult	Male	18-May-2011	0.30	± 0.04	0.18	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00175	Adult	Male	24-Jul-2012	0.12 ± 0.01	0.14	Nal_WBC	RE
EN00175	Adult	Male	29-Nov-2012	0.17 ± 0.01	0.12	Nal_WBC	RE
EN00177	Adult	Male	20-Nov-2012	0.00	0.05	Nal_WBC	RE
EN00179	Adult	Female	2-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00180	Adult	Male	29-Jan-2010	0.00	0.06	Nal_WBC	RE
EN00180	Adult	Male	12-Apr-2010	0.03 ± 0.02	0.08	Nal_WBC	RE
EN00180	Adult	Male	10-May-2010	0.03 ± 0.02	0.08	Nal_WBC	RE, Northern Is.
EN00180	Adult	Male	10-Nov-2010	0.00	0.07	Nal_WBC	RE, Northern Is.
EN00180	Adult	Male	22-Mar-2011	0.62 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00180	Adult	Male	11-Apr-2011	0.62 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00180	Adult	Male	9-Oct-2012	0.00	0.10	Nal_WBC	RE
EN00181	Adult	Male	19-Feb-2010	0.10 ± 0.03	0.12	Nal_WBC	RE
EN00181	Adult	Male	13-Apr-2010	0.09 ± 0.02	0.11	Nal_WBC	RE
EN00181	Adult	Male	25-Oct-2010	0.12 ± 0.02	0.11	Nal_WBC	RE
EN00181	Adult	Male	7-Jun-2011	0.00	0.11	Nal_WBC	RE
EN00181	Adult	Male	15-Jul-2011	0.00	0.11	Nal_WBC	RE
EN00181	Adult	Male	19-Jan-2012	0.00	0.06	Nal_WBC	RE
EN00181	Adult	Male	28-Jun-2012	0.16 ± 0.01	0.13	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00181	Adult	Male	1-Oct-2012	0.16 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00184	Adult	Male	17-Mar-2010	0.00	0.06	Nal_WBC	RE
EN00184	Adult	Male	12-Apr-2010	0.00	0.06	Nal_WBC	RE
EN00184	Adult	Male	6-Apr-2011	0.73 ± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00184	Adult	Male	3-Jun-2011	1.26 ± 0.05	0.18	Nal_WBC	RE, Northern Is.
EN00184	Adult	Male	12-Jul-2011	1.26 ± 0.05	0.18	Nal_WBC	RE, Northern Is.
EN00184	Adult	Male	8-May-2012	0.81 ± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00184	Adult	Male	4-Jul-2012	0.48 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00185	Adult	Male	14-Apr-2010	0.38 ± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00185	Adult	Male	21-Jun-2010	0.49 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00185	Adult	Male	14-Aug-2010	0.45 ± 0.07	0.32	Nal_WBC	RE, Northern Is.
EN00185	Adult	Male	5-Jul-2012	1.04 ± 0.09	0.36	Nal_WBC	RE
EN00186	Adult	Male	14-Feb-2012	0.11 ± 0.01	0.13	Nal_WBC	RE
EN00186	Adult	Male	20-Jul-2012	0.16 ± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00189	Adult	Male	11-Aug-2010	0.23 ± 0.03	0.12	Nal_WBC	RE
EN00189	Adult	Male	6-Apr-2011	0.57 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00189	Adult	Male	28-May-2011	1.97 ± 0.11	0.38	Nal_WBC	RE, Northern Is.
EN00189	Adult	Male	27-Jan-2012	0.40 ± 0.02	0.13	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00189	Adult	Male	30-Apr-2012	0.33	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00189	Adult	Male	16-Oct-2012	0.26	± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00189	Adult	Male	21-Nov-2012	0.25	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00193	Adult	Female	25-May-2010	0.05	± 0.02	0.09	Nal_WBC	RE
EN00193	Adult	Female	11-May-2011	0.11	± 0.02	0.10	Nal_WBC	RE
EN00197	Adult	Female	2-Oct-2010	0.00		0.11	Nal_WBC	RE
EN00197	Adult	Female	27-May-2011	0.00		0.06	Nal_WBC	RE
EN00198	Adult	Female	6-Aug-2010	0.03	± 0.02	0.08	Nal_WBC	RE
EN00198	Adult	Female	29-Apr-2011	0.00		0.06	Nal_WBC	RE
EN00198	Adult	Female	27-Jul-2012	0.00		0.06	Nal_WBC	RE
EN00199	Adult	Female	14-Apr-2010	0.05	± 0.03	0.12	Nal_WBC	RE
EN00199	Adult	Female	16-Jun-2011	0.25	± 0.05	0.23	Nal_WBC	RE
EN00199	Adult	Female	19-Jul-2012	0.17	± 0.01	0.13	Nal_WBC	RE
EN00201	Adult	Female	9-Feb-2012	0.33	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00201	Adult	Female	7-May-2012	0.34	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00201	Adult	Female	9-Jul-2012	0.19	± 0.05	0.24	Nal_WBC	RE, Northern Is.
EN00203	Adult	Female	2-Sep-2010	0.06	± 0.03	0.14	Nal_WBC	RE
EN00203	Adult	Female	25-Apr-2012	0.08	± 0.01	0.13	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00204	Adult	Female	7-Jun-2010	0.11	± 0.03	0.12	Nal_WBC	RE
EN00204	Adult	Female	13-Jun-2011	0.26	± 0.03	0.15	Nal_WBC	RE
EN00204	Adult	Female	5-Oct-2012	0.00		0.06	Nal_WBC	RE
EN00205	Adult	Female	1-Sep-2010	0.00		0.06	Nal_WBC	RE
EN00205	Adult	Female	30-Apr-2012	0.08	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00205	Adult	Female	12-Jul-2012	0.00		0.11	Nal_WBC	RE, Northern Is.
EN00206	Adult	Male	22-Sep-2010	0.08	± 0.03	0.12	Nal_WBC	RE
EN00206	Adult	Male	13-Jul-2012	0.06	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00208	Adult	Female	5-Feb-2010	0.00		0.06	Nal_WBC	RE
EN00208	Adult	Female	13-Mar-2010	0.00		0.11	Nal_WBC	RE
EN00208	Adult	Female	8-Apr-2010	0.00		0.06	Nal_WBC	RE
EN00208	Adult	Female	13-Nov-2010	0.00		0.11	Nal_WBC	RE
EN00208	Adult	Female	13-Jul-2011	0.00		0.11	Nal_WBC	RE
EN00208	Adult	Female	8-May-2012	0.76	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00208	Adult	Female	8-Jun-2012	0.48	± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00208	Adult	Female	19-Jun-2012	0.43	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00208	Adult	Female	8-Aug-2012	0.42	± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00211	Adult	Female	17-Sep-2010	0.29	± 0.04	0.16	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00211	Adult	Female	10-May-2011	0.09	± 0.02	0.11	Nal_WBC	RE
EN00211	Adult	Female	20-Jan-2012	0.06	± 0.01	0.13	Nal_WBC	RE
EN00212	Adult	Female	16-Sep-2010	0.00		0.06	Nal_WBC	RE
EN00212	Adult	Female	27-Jul-2012	0.00		0.06	Nal_WBC	RE
EN00213	Adult	Female	17-Jun-2011	0.00		0.06	Nal_WBC	RE
EN00214	Adult	Female	10-Sep-2010	0.00		0.10	Nal_WBC	NR
EN00216	Adult	Female	26-Jan-2012	0.00		0.05	Nal_WBC	RE
EN00220	Adult	Female	29-Jul-2010	0.00		0.06	Nal_WBC	RE
EN00220	Adult	Female	2-Jun-2011	0.00		0.11	Nal_WBC	RE
EN00220	Adult	Female	4-Apr-2012	0.00		0.06	Nal_WBC	RE
EN00221	Adult	Female	10-May-2010	0.00		0.10	Nal_WBC	RE
EN00221	Adult	Female	2-Sep-2010	0.00		0.06	Nal_WBC	RE
EN00222	Adult	Female	26-Jan-2010	0.00		0.06	Nal_WBC	RE, Northern Is.
EN00222	Adult	Female	13-Apr-2010	0.00		0.06	Nal_WBC	RE, Northern Is.
EN00222	Adult	Female	21-Jun-2010	0.00		0.06	Nal_WBC	RE, Northern Is.
EN00222	Adult	Female	10-Aug-2010	0.00		0.11	Nal_WBC	RE, Northern Is.
EN00222	Adult	Female	28-Feb-2011	0.15	± 0.03	0.13	Nal_WBC	RE
EN00222	Adult	Female	15-Apr-2011	0.09	± 0.02	0.09	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00222	Adult	Female	15-Jun-2011	0.00	0.11	Nal_WBC	RE
EN00222	Adult	Female	28-Mar-2012	0.00	0.06	Nal_WBC	RE
EN00222	Adult	Female	9-Oct-2012	0.06 ± 0.01	0.12	Nal_WBC	RE, Northern Is.
EN00222	Adult	Female	12-Nov-2012	0.15 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00226	Adult	Male	23-Mar-2010	0.13 ± 0.03	0.11	Nal_WBC	RE
EN00226	Adult	Male	12-Apr-2010	0.08 ± 0.03	0.12	Nal_WBC	RE
EN00226	Adult	Male	20-Sep-2010	0.09 ± 0.02	0.11	Nal_WBC	RE
EN00226	Adult	Male	8-Apr-2011	0.79 ± 0.05	0.18	Nal_WBC	RE, Northern Is.
EN00226	Adult	Male	11-May-2011	0.52 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00226	Adult	Male	8-Jul-2011	0.83 ± 0.05	0.20	Nal_WBC	RE, Northern Is.
EN00226	Adult	Male	19-Mar-2012	0.10 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00226	Adult	Male	11-May-2012	1.01 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00226	Adult	Male	21-Jun-2012	0.98 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00226	Adult	Male	12-Jul-2012	0.79 ± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00226	Adult	Male	10-Aug-2012	0.75 ± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00227	Adult	Male	28-Jun-2010	0.42 ± 0.04	0.18	Nal_WBC	RE
EN00227	Adult	Male	3-Mar-2011	0.50 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00227	Adult	Male	10-Feb-2012	0.09 ± 0.01	0.13	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00230	Adult	Male	20-Jan-2010	0.00	0.07	Nal_WBC	RE
EN00230	Adult	Male	2-Mar-2010	0.07 ± 0.04	0.16	Nal_WBC	RE
EN00230	Adult	Male	26-Mar-2010	0.00	0.06	Nal_WBC	RE
EN00230	Adult	Male	28-Jun-2010	0.13 ± 0.03	0.12	Nal_WBC	RE, Northern Is.
EN00230	Adult	Male	3-Mar-2011	0.45 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00230	Adult	Male	15-Feb-2012	0.35 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00230	Adult	Male	19-Mar-2012	0.39 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00230	Adult	Male	10-May-2012	2.94 ± 0.08	0.17	Nal_WBC	RE, Northern Is.
EN00230	Adult	Male	9-Jul-2012	2.08 ± 0.11	0.42	Nal_WBC	RE, Northern Is.
EN00232	Adult	Female	20-Apr-2011	0.54 ± 0.04	0.19	Nal_WBC	RE, Northern Is.
EN00232	Adult	Female	10-May-2011	0.48 ± 0.05	0.22	Nal_WBC	RE, Northern Is.
EN00233	Adult	Female	16-Jan-2012	0.06 ± 0.03	0.15	Nal_WBC	NR
EN00233	Adult	Female	3-May-2012	0.00	0.11	Nal_WBC	RE
EN00237	Adult	Female	15-Sep-2010	0.05 ± 0.02	0.08	Nal_WBC	RE
EN00237	Adult	Female	29-Apr-2011	0.00	0.06	Nal_WBC	RE
EN00237	Adult	Female	4-May-2012	0.00	0.06	Nal_WBC	RE
EN00238	Adult	Male	24-Jun-2010	0.03 ± 0.02	0.09	Nal_WBC	RE
EN00238	Adult	Male	13-Sep-2012	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00238	Adult	Male	29-Nov-2012	0.00	0.11	Nal_WBC	RE
EN00239	Adult	Female	15-Sep-2010	0.14 ± 0.03	0.13	Nal_WBC	RE
EN00239	Adult	Female	26-Mar-2012	0.00	0.06	Nal_WBC	RE
EN00240	Adult	Female	28-Aug-2010	0.00	0.10	Nal_WBC	RE
EN00240	Adult	Female	8-Sep-2011	0.00	0.10	Nal_WBC	RE
EN00240	Adult	Female	13-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00244	Adult	Male	6-Sep-2010	0.13 ± 0.04	0.17	Nal_WBC	RE
EN00244	Adult	Male	12-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00246	Adult	Female	1-Apr-2011	0.46 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00246	Adult	Female	20-Oct-2011	0.00	0.11	Nal_WBC	RE, Northern Is.
EN00246	Adult	Female	29-Mar-2012	0.00	0.06	Nal_WBC	RE
EN00246	Adult	Female	10-Jul-2012	0.00	0.06	Nal_WBC	RE
EN00249	Adult	Female	7-Sep-2010	0.06 ± 0.02	0.10	Nal_WBC	RE
EN00249	Adult	Female	4-Oct-2012	0.00	0.06	Nal_WBC	RE
EN00251	Adult	Female	19-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00252	Adult	Female	7-Jun-2010	0.20 ± 0.04	0.18	Nal_WBC	RE
EN00252	Adult	Female	16-Feb-2012	0.00	0.06	Nal_WBC	RE
EN00253	Adult	Female	2-Oct-2010	0.00	0.11	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00253	Adult	Female	14-Apr-2011	0.00	0.06	Nal_WBC	RE
EN00253	Adult	Female	20-Jan-2012	0.00	0.06	Nal_WBC	RE
EN00257	Adult	Female	15-Sep-2010	0.12 ± 0.03	0.12	Nal_WBC	RE
EN00258	Adult	Female	12-Jul-2012	0.00	3.90	Nal_WBC	RE
EN00262	Adult	Female	11-Jun-2010	0.15 ± 0.03	0.12	Nal_WBC	RE
EN00262	Adult	Female	14-Jun-2011	0.13 ± 0.02	0.11	Nal_WBC	RE
EN00262	Adult	Female	9-Aug-2011	0.28 ± 0.06	0.26	Nal_WBC	RE
EN00262	Adult	Female	14-Sep-2012	0.00	0.05	Nal_WBC	RE
EN00263	Adult	Female	7-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00263	Adult	Female	20-Apr-2011	0.31 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00264	Adult	Female	2-Jun-2011	0.00	0.06	Nal_WBC	RE
EN00267	Adult	Female	8-Feb-2010	0.00	0.06	Nal_WBC	RE
EN00267	Adult	Female	21-Jun-2010	0.16 ± 0.03	0.12	Nal_WBC	RE, Northern Is.
EN00267	Adult	Female	23-Jul-2010	0.40 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00267	Adult	Female	10-May-2011	0.07 ± 0.02	0.10	Nal_WBC	RE
EN00267	Adult	Female	21-Sep-2011	0.00	0.11	Nal_WBC	RE
EN00267	Adult	Female	24-Jan-2012	0.15 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00267	Adult	Female	7-May-2012	0.67 ± 0.02	0.14	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00267	Adult	Female	12-Jul-2012	0.82 ± 0.08	0.35	Nal_WBC	RE, Northern Is.
EN00267	Adult	Female	20-Sep-2012	0.21 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00267	Adult	Female	11-Oct-2012	0.38 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00267	Adult	Female	8-Nov-2012	0.28 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00268	Adult	Female	31-Aug-2010	0.00	0.06	Nal_WBC	RE
EN00268	Adult	Female	27-May-2011	0.00	0.06	Nal_WBC	RE
EN00269	Adult	Female	13-Apr-2010	0.10 ± 0.02	0.11	Nal_WBC	RE, Northern Is.
EN00273	Adult	Female	27-Jan-2010	0.00	0.06	Nal_WBC	RE
EN00273	Adult	Female	11-Oct-2010	0.32 ± 0.04	0.16	Nal_WBC	RE
EN00273	Adult	Female	13-Nov-2010	0.00	0.11	Nal_WBC	RE
EN00273	Adult	Female	29-Jun-2012	0.20 ± 0.01	0.13	Nal_WBC	RE
EN00274	Adult	Female	13-Apr-2010	0.00	0.06	Nal_WBC	RE
EN00274	Adult	Female	17-May-2011	0.30 ± 0.04	0.16	Nal_WBC	RE
EN00275	Adult	Female	17-Sep-2010	0.18 ± 0.04	0.16	Nal_WBC	RE
EN00276	Adult	Female	5-Aug-2011	0.00	0.10	Nal_WBC	NR
EN00277	Adult	Female	24-Jun-2010	0.04 ± 0.02	0.09	Nal_WBC	RE
EN00277	Adult	Female	14-Sep-2012	0.00	0.06	Nal_WBC	RE
EN00280	Adult	Female	7-Sep-2010	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00281	Adult	Female	14-Apr-2010	0.05	± 0.02	0.08	Nal_WBC	RE, Northern Is.
EN00281	Adult	Female	6-Apr-2011	0.43	± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00281	Adult	Female	3-Jun-2011	1.00	± 0.05	0.21	Nal_WBC	RE, Northern Is.
EN00281	Adult	Female	11-Jul-2011	1.32	± 0.06	0.19	Nal_WBC	RE, Northern Is.
EN00283	Adult	Female	11-Jun-2010	0.00		0.06	Nal_WBC	RE
EN00283	Adult	Female	16-Jun-2011	0.05	± 0.02	0.08	Nal_WBC	RE
EN00284	Adult	Female	27-Sep-2011	0.00		0.11	Nal_WBC	RE
EN00284	Adult	Female	25-Apr-2012	0.00		0.06	Nal_WBC	RE
EN00286	Adult	Female	11-May-2011	0.04	± 0.02	0.10	Nal_WBC	RE
EN00287	Adult	Female	13-Feb-2010	0.00		0.06	Nal_WBC	RE
EN00287	Adult	Female	11-Nov-2010	0.00		0.06	Nal_WBC	RE
EN00287	Adult	Female	30-Dec-2010	0.00		0.11	Nal_WBC	RE
EN00287	Adult	Female	29-Oct-2012	0.00		0.05	Nal_WBC	RE
EN00288	Adult	Female	19-Mar-2010	0.00		0.06	Nal_WBC	RE
EN00288	Adult	Female	23-Apr-2012	0.00		0.06	Nal_WBC	RE
EN00290	Adult	Female	7-Oct-2010	0.00		0.06	Nal_WBC	RE
EN00290	Adult	Female	30-Oct-2012	0.00		0.06	Nal_WBC	RE
EN00291	Adult	Female	11-Apr-2012	0.13	± 0.01	0.13	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00292	Adult	Female	11-Oct-2012	0.11	± 0.01	0.13	Nal_WBC	RE
EN00295	Adult	Female	8-Jun-2010	0.08	± 0.02	0.11	Nal_WBC	RE
EN00295	Adult	Female	25-Oct-2012	0.14	± 0.01	0.13	Nal_WBC	RE
EN00296	Adult	Female	11-Apr-2012	0.00		0.06	Nal_WBC	RE
EN00297	Adult	Female	28-Jun-2010	0.37	± 0.04	0.17	Nal_WBC	RE
EN00297	Adult	Female	3-Mar-2011	0.17	± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN00297	Adult	Female	10-Feb-2012	0.06	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00298	Adult	Female	9-Aug-2010	0.12	± 0.04	0.18	Nal_WBC	RE
EN00302	Adult	Female	27-Apr-2011	0.06	± 0.02	0.10	Nal_WBC	RE
EN00303	Adult	Female	14-Apr-2010	0.03	± 0.01	0.06	Nal_WBC	RE
EN00303	Adult	Female	27-Apr-2011	0.04	± 0.02	0.09	Nal_WBC	RE
EN00303	Adult	Female	11-Sep-2012	0.00		0.06	Nal_WBC	RE
EN00304	Adult	Female	1-Sep-2010	0.00		0.06	Nal_WBC	RE
EN00304	Adult	Female	28-Apr-2011	0.00		0.06	Nal_WBC	RE
EN00304	Adult	Female	23-Apr-2012	0.00		0.06	Nal_WBC	RE
EN00305	Adult	Female	7-Sep-2010	0.40	± 0.04	0.15	Nal_WBC	RE
EN00305	Adult	Female	4-Apr-2012	0.16	± 0.01	0.13	Nal_WBC	RE
EN00312	Adult	Female	14-Apr-2010	0.05	± 0.02	0.09	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00312	Adult	Female	13-Nov-2010	0.20 ± 0.05	0.24	Nal_WBC	RE
EN00312	Adult	Female	21-Mar-2011	1.22 ± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00312	Adult	Female	6-Apr-2011	1.11 ± 0.05	0.20	Nal_WBC	RE, Northern Is.
EN00312	Adult	Female	8-Mar-2012	0.00	0.06	Nal_WBC	RE
EN00312	Adult	Female	31-Jul-2012	0.09 ± 0.01	0.13	Nal_WBC	RE
EN00313	Adult	Female	7-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00313	Adult	Female	13-Apr-2012	0.00	0.05	Nal_WBC	RE
EN00314	Adult	Female	9-Sep-2011	0.00	0.10	Nal_WBC	RE
EN00315	Adult	Female	26-May-2010	0.00	0.06	Nal_WBC	RE
EN00315	Adult	Female	11-Oct-2010	0.07 ± 0.02	0.08	Nal_WBC	RE
EN00315	Adult	Female	13-Nov-2010	0.05 ± 0.03	0.15	Nal_WBC	RE
EN00315	Adult	Female	30-Mar-2011	0.04 ± 0.02	0.10	Nal_WBC	RE
EN00315	Adult	Female	17-Jan-2012	0.15 ± 0.01	0.12	Nal_WBC	RE, Northern Is.
EN00317	Adult	Female	14-Apr-2011	0.00	0.06	Nal_WBC	RE
EN00317	Adult	Female	6-Jun-2011	0.33 ± 0.03	0.15	Nal_WBC	RE
EN00317	Adult	Female	29-Jun-2011	0.50 ± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00317	Adult	Female	31-Jan-2012	0.20 ± 0.01	0.14	Nal_WBC	RE
EN00317	Adult	Female	13-Jul-2012	0.00	0.11	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00318	Adult	Female	18-Sep-2010	0.00	0.10	Nal_WBC	NR
EN00318	Adult	Female	15-Sep-2011	0.00	0.10	Nal_WBC	NR
EN00319	Adult	Female	31-Aug-2010	0.00	0.06	Nal_WBC	RE
EN00319	Adult	Female	16-Jun-2011	0.21 ± 0.03	0.15	Nal_WBC	RE
EN00319	Adult	Female	8-Aug-2012	0.10 ± 0.01	0.13	Nal_WBC	RE
EN00320	Adult	Female	14-Jan-2010	0.03 ± 0.02	0.09	Nal_WBC	RE, Northern Is.
EN00320	Adult	Female	21-Jun-2010	0.10 ± 0.03	0.16	Nal_WBC	RE, Northern Is.
EN00320	Adult	Female	6-Nov-2010	0.00	0.11	Nal_WBC	RE, Northern Is.
EN00320	Adult	Female	28-Feb-2011	0.11 ± 0.03	0.12	Nal_WBC	RE, Northern Is.
EN00320	Adult	Female	7-Jun-2011	0.00	0.11	Nal_WBC	RE, Northern Is.
EN00320	Adult	Female	31-Jul-2012	0.06 ± 0.04	0.17	Nal_WBC	RE
EN00323	Adult	Female	24-May-2010	0.07 ± 0.02	0.10	Nal_WBC	RE
EN00323	Adult	Female	11-May-2011	0.00	0.06	Nal_WBC	RE
EN00330	Adult	Female	19-Mar-2010	0.46 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00330	Adult	Female	9-Aug-2010	0.34 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00330	Adult	Female	8-Oct-2010	0.72 ± 0.05	0.20	Nal_WBC	RE, Northern Is.
EN00330	Adult	Female	22-Oct-2010	0.63 ± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00330	Adult	Female	28-Feb-2011	1.26 ± 0.05	0.17	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00333	Adult	Female	2-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00333	Adult	Female	4-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00334	Adult	Female	31-May-2011	0.34 ± 0.03	0.12	Nal_WBC	RE, Northern Is.
EN00334	Adult	Female	29-Jun-2011	0.50 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00334	Adult	Female	14-Jul-2011	0.59 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00334	Adult	Female	29-Mar-2012	0.09 ± 0.01	0.13	Nal_WBC	RE
EN00335	Adult	Female	4-Oct-2010	0.00	0.07	Nal_WBC	RE
EN00335	Adult	Female	2-May-2011	0.10 ± 0.02	0.09	Nal_WBC	RE
EN00335	Adult	Female	15-Jun-2011	0.00	0.11	Nal_WBC	RE
EN00337	Adult	Female	1-Aug-2011	0.00	0.11	Nal_WBC	RE
EN00339	Adult	Female	25-May-2010	0.05 ± 0.02	0.08	Nal_WBC	RE
EN00340	Adult	Female	13-Jul-2012	0.00	0.06	Nal_WBC	RE
EN00344	Adult	Male	14-Jan-2010	0.35 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00344	Adult	Male	15-Feb-2010	0.60 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00344	Adult	Male	5-Mar-2010	0.51 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00344	Adult	Male	7-May-2010	0.64 ± 0.05	0.20	Nal_WBC	RE, Northern Is.
EN00344	Adult	Male	21-Jun-2010	0.74 ± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00344	Adult	Male	6-Nov-2010	0.81 ± 0.08	0.35	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00344	Adult	Male	28-Feb-2011	0.50	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00344	Adult	Male	21-Mar-2011	0.67	± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00344	Adult	Male	21-Apr-2011	0.74	± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00344	Adult	Male	18-Jan-2012	0.18	± 0.01	0.13	Nal_WBC	RE
EN00344	Adult	Male	11-Jul-2012	0.00		0.12	Nal_WBC	RE
EN00344	Adult	Male	24-Sep-2012	0.00		0.06	Nal_WBC	RE, Northern Is.
EN00344	Adult	Male	30-Nov-2012	0.24	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00346	Adult	Female	25-May-2010	0.10	± 0.02	0.10	Nal_WBC	RE
EN00346	Adult	Female	21-Sep-2011	0.00		0.10	Nal_WBC	RE
EN00347	Adult	Female	31-Jan-2012	0.00		0.06	Nal_WBC	RE
EN00348	Adult	Female	8-Apr-2010	0.20	± 0.04	0.17	Nal_WBC	RE
EN00348	Adult	Female	3-Mar-2011	1.29	± 0.06	0.21	Nal_WBC	RE, Northern Is.
EN00348	Adult	Female	30-Mar-2011	1.27	± 0.05	0.18	Nal_WBC	RE, Northern Is.
EN00348	Adult	Female	11-May-2011	1.27	± 0.05	0.18	Nal_WBC	RE, Northern Is.
EN00348	Adult	Female	3-Feb-2012	1.05	± 0.03	0.15	Nal_WBC	RE
EN00348	Adult	Female	24-Feb-2012	1.44	± 0.04	0.15	Nal_WBC	RE
EN00348	Adult	Female	27-Mar-2012	1.18	± 0.04	0.15	Nal_WBC	RE
EN00348	Adult	Female	2-Nov-2012	0.55	± 0.02	0.14	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00349	Adult	Female	30-Jul-2010	0.17	± 0.03	0.14	Nal_WBC	RE
EN00349	Adult	Female	31-May-2011	0.05	± 0.02	0.10	Nal_WBC	RE
EN00349	Adult	Female	26-Mar-2012	0.00		0.06	Nal_WBC	RE
EN00352	Adult	Female	21-Mar-2012	0.00		0.06	Nal_WBC	RE
EN00352	Adult	Female	13-Apr-2012	0.00		0.06	Nal_WBC	RE
EN00353	Adult	Male	5-Jan-2012	0.00		0.05	Nal_WBC	RE
EN00353	Adult	Male	21-Mar-2012	0.00		0.06	Nal_WBC	RE
EN00355	Adult	Male	22-Mar-2011	0.11	± 0.02	0.10	Nal_WBC	RE, Northern Is.
EN00357	Adult	Female	26-May-2010	0.00		0.06	Nal_WBC	RE
EN00358	Adult	Female	6-Sep-2010	0.00		0.06	Nal_WBC	RE
EN00359	Adult	Male	22-Jan-2010	0.00		0.07	Nal_WBC	RE
EN00359	Adult	Male	26-Feb-2010	0.14	± 0.03	0.12	Nal_WBC	RE
EN00359	Adult	Male	26-Mar-2010	0.07	± 0.02	0.10	Nal_WBC	RE
EN00359	Adult	Male	21-May-2010	0.07	± 0.02	0.10	Nal_WBC	RE
EN00359	Adult	Male	21-Jun-2010	0.12	± 0.02	0.11	Nal_WBC	RE
EN00359	Adult	Male	20-Sep-2010	0.09	± 0.02	0.09	Nal_WBC	RE
EN00359	Adult	Male	28-Oct-2010	0.10	± 0.02	0.09	Nal_WBC	RE
EN00359	Adult	Male	24-Mar-2011	0.21	± 0.04	0.16	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00359	Adult	Male	28-May-2011	0.33	± 0.06	0.28	Nal_WBC	RE
EN00359	Adult	Male	12-Jan-2012	0.05	± 0.01	0.13	Nal_WBC	RE
EN00359	Adult	Male	8-Feb-2012	0.06	± 0.01	0.13	Nal_WBC	RE
EN00359	Adult	Male	16-Apr-2012	0.05	± 0.01	0.13	Nal_WBC	RE
EN00359	Adult	Male	11-Sep-2012	0.07	± 0.01	0.13	Nal_WBC	RE
EN00359	Adult	Male	24-Oct-2012	0.00		0.06	Nal_WBC	RE
EN00360	Adult	Female	16-Apr-2010	0.00		0.06	Nal_WBC	RE
EN00360	Adult	Female	26-Oct-2012	0.09	± 0.01	0.13	Nal_WBC	RE
EN00362	Adult	Female	30-Mar-2011	0.00		0.06	Nal_WBC	RE
EN00362	Adult	Female	13-Apr-2012	0.06	± 0.01	0.13	Nal_WBC	RE
EN00362	Adult	Female	18-Jul-2012	0.00		0.11	Nal_WBC	RE
EN00367	Adult	Female	15-Jun-2011	0.07	± 0.02	0.10	Nal_WBC	RE
EN00367	Adult	Female	5-Oct-2012	0.00		0.06	Nal_WBC	RE
EN00373	Adult	Female	11-Mar-2010	0.39	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00373	Adult	Female	7-Apr-2010	0.34	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00373	Adult	Female	10-May-2010	0.08	± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00373	Adult	Female	24-Jan-2012	0.33	± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00373	Adult	Female	28-Mar-2012	0.12	± 0.01	0.13	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00373	Adult	Female	4-Jul-2012	0.08	± 0.04	0.20	Nal_WBC	RE, Northern Is.
EN00373	Adult	Female	29-Oct-2012	0.17	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00376	Adult	Male	18-Feb-2010	0.60	± 0.04	0.18	Nal_WBC	RE
EN00376	Adult	Male	12-Apr-2010	0.67	± 0.05	0.21	Nal_WBC	RE
EN00376	Adult	Male	11-Apr-2011	1.27	± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00376	Adult	Male	1-Feb-2012	1.10	± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00376	Adult	Male	26-Mar-2012	1.60	± 0.05	0.15	Nal_WBC	RE, Northern Is.
EN00376	Adult	Male	17-May-2012	1.96	± 0.06	0.16	Nal_WBC	RE, Northern Is.
EN00376	Adult	Male	13-Jun-2012	1.82	± 0.05	0.15	Nal_WBC	RE, Northern Is.
EN00376	Adult	Male	1-Aug-2012	2.61	± 0.07	0.16	Nal_WBC	RE, Northern Is.
EN00379	Adult	Male	14-Apr-2010	0.00		0.07	Nal_WBC	RE, Northern Is.
EN00379	Adult	Male	24-Oct-2012	0.31	± 0.02	0.13	Nal_WBC	RE
EN00380	Adult	Male	12-May-2010	0.13	± 0.02	0.11	Nal_WBC	RE
EN00380	Adult	Male	19-Apr-2011	0.12	± 0.02	0.11	Nal_WBC	RE, Northern Is.
EN00380	Adult	Male	29-Oct-2012	0.10	± 0.01	0.12	Nal_WBC	RE
EN00390	Adult	Female	15-Mar-2010	0.00		0.06	Nal_WBC	RE
EN00390	Adult	Female	29-Jul-2010	0.00		0.06	Nal_WBC	RE
EN00390	Adult	Female	28-Mar-2011	0.49	± 0.04	0.16	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00390	Adult	Female	26-Jul-2011	0.27	± 0.06	0.27	Nal_WBC	RE, Northern Is.
EN00391	Adult	Male	28-Jan-2010	0.04	± 0.02	0.09	Nal_WBC	RE
EN00391	Adult	Male	23-Feb-2010	0.06	± 0.02	0.11	Nal_WBC	RE
EN00391	Adult	Male	24-Mar-2010	0.07	± 0.02	0.09	Nal_WBC	RE
EN00391	Adult	Male	20-May-2010	0.10	± 0.02	0.09	Nal_WBC	RE
EN00391	Adult	Male	22-Jun-2010	0.32	± 0.04	0.16	Nal_WBC	RE
EN00391	Adult	Male	24-Aug-2010	0.37	± 0.04	0.16	Nal_WBC	RE
EN00391	Adult	Male	22-Sep-2010	0.18	± 0.03	0.15	Nal_WBC	RE
EN00391	Adult	Male	23-Oct-2010	0.25	± 0.07	0.31	Nal_WBC	RE
EN00391	Adult	Male	7-Feb-2012	0.10	± 0.01	0.13	Nal_WBC	RE
EN00391	Adult	Male	24-Jul-2012	0.13	± 0.01	0.13	Nal_WBC	RE
EN00391	Adult	Male	29-Nov-2012	0.13	± 0.01	0.12	Nal_WBC	RE
EN00393	Adult	Male	4-Mar-2010	0.00		0.06	Nal_WBC	RE
EN00393	Adult	Male	12-May-2010	0.00		0.06	Nal_WBC	RE
EN00393	Adult	Male	23-Mar-2011	0.09	± 0.02	0.08	Nal_WBC	RE
EN00393	Adult	Male	18-May-2011	0.28	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00393	Adult	Male	28-Jun-2011	0.25	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00393	Adult	Male	11-Jan-2012	0.10	± 0.01	0.13	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00393	Adult	Male	7-Feb-2012	0.08 ± 0.01	0.14	Nal_WBC	RE
EN00393	Adult	Male	26-Jul-2012	0.08 ± 0.01	0.13	Nal_WBC	RE
EN00393	Adult	Male	17-Sep-2012	0.00	0.06	Nal_WBC	RE
EN00393	Adult	Male	24-Oct-2012	0.00	0.06	Nal_WBC	RE
EN00396	Adult	Female	10-Aug-2010	0.10 ± 0.05	0.25	Nal_WBC	RE
EN00398	Adult	Male	29-Jan-2010	0.00	0.07	Nal_WBC	RE
EN00398	Adult	Male	9-Apr-2010	0.00	0.06	Nal_WBC	RE
EN00398	Adult	Male	9-Sep-2010	0.13 ± 0.02	0.11	Nal_WBC	RE
EN00398	Adult	Male	3-Nov-2010	0.16 ± 0.02	0.09	Nal_WBC	RE, Northern Is.
EN00398	Adult	Male	21-Mar-2011	2.42 ± 0.08	0.20	Nal_WBC	RE, Northern Is.
EN00398	Adult	Male	6-Apr-2011	2.53 ± 0.08	0.20	Nal_WBC	RE, Northern Is.
EN00398	Adult	Male	14-Feb-2012	0.60 ± 0.02	0.14	Nal_WBC	RE
EN00398	Adult	Male	26-Apr-2012	0.57 ± 0.02	0.14	Nal_WBC	RE
EN00398	Adult	Male	22-May-2012	0.68 ± 0.02	0.14	Nal_WBC	RE
EN00398	Adult	Male	10-Oct-2012	0.67 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00398	Adult	Male	8-Nov-2012	0.51 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00399	Adult	Female	15-Apr-2010	0.00	0.06	Nal_WBC	RE
EN00399	Adult	Female	31-May-2011	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00403	Adult	Male	22-Jan-2010	0.58	± 0.04	0.18	Nal_WBC	RE
EN00403	Adult	Male	18-Mar-2010	0.95	± 0.05	0.18	Nal_WBC	RE, Northern Is.
EN00403	Adult	Male	8-Apr-2010	0.86	± 0.05	0.18	Nal_WBC	RE, Northern Is.
EN00403	Adult	Male	10-May-2010	0.95	± 0.05	0.18	Nal_WBC	RE, Northern Is.
EN00403	Adult	Male	3-Aug-2010	1.18	± 0.06	0.20	Nal_WBC	RE, Northern Is.
EN00403	Adult	Male	1-Oct-2010	1.65	± 0.06	0.18	Nal_WBC	RE, Northern Is.
EN00403	Adult	Male	8-Oct-2010	1.39	± 0.05	0.16	Nal_WBC	RE, Northern Is.
EN00403	Adult	Male	26-Oct-2010	1.37	± 0.06	0.20	Nal_WBC	RE, Northern Is.
EN00403	Adult	Male	28-Feb-2011	2.44	± 0.08	0.23	Nal_WBC	RE
EN00403	Adult	Male	27-Apr-2011	2.44	± 0.08	0.19	Nal_WBC	RE
EN00404	Adult	Female	27-May-2011	0.00		0.06	Nal_WBC	RE
EN00405	Adult	Female	16-Apr-2010	0.00		0.06	Nal_WBC	RE
EN00405	Adult	Female	26-May-2011	0.00		0.06	Nal_WBC	RE
EN00405	Adult	Female	4-Oct-2012	0.00		0.06	Nal_WBC	RE
EN00408	Adult	Female	14-Jan-2010	0.10	± 0.04	0.16	Nal_WBC	RE
EN00408	Adult	Female	9-Apr-2010	0.07	± 0.02	0.11	Nal_WBC	RE
EN00408	Adult	Female	2-Mar-2011	0.27	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00408	Adult	Female	28-Mar-2011	0.23	± 0.04	0.16	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00408	Adult	Female	27-Apr-2011	0.39 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00408	Adult	Female	27-May-2011	0.00	0.11	Nal_WBC	RE, Northern Is.
EN00408	Adult	Female	15-Jul-2011	0.08 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00408	Adult	Female	31-Jul-2012	0.00	0.11	Nal_WBC	RE
EN00408	Adult	Female	31-Oct-2012	0.00	0.06	Nal_WBC	RE
EN00412	Adult	Male	21-Jan-2010	0.39 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00412	Adult	Male	18-Mar-2010	0.57 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00412	Adult	Male	9-Apr-2010	0.47 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00412	Adult	Male	17-May-2010	0.51 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00412	Adult	Male	1-Nov-2010	1.20 ± 0.06	0.20	Nal_WBC	RE, Northern Is.
EN00412	Adult	Male	3-Mar-2011	1.63 ± 0.06	0.20	Nal_WBC	RE, Northern Is.
EN00412	Adult	Male	4-Apr-2011	2.09 ± 0.07	0.19	Nal_WBC	RE, Northern Is.
EN00412	Adult	Male	3-Feb-2012	2.80 ± 0.08	0.17	Nal_WBC	RE, Northern Is.
EN00412	Adult	Male	20-Feb-2012	3.13 ± 0.09	0.17	Nal_WBC	RE, Northern Is.
EN00412	Adult	Male	23-Mar-2012	3.35 ± 0.09	0.17	Nal_WBC	RE, Northern Is.
EN00412	Adult	Male	2-May-2012	2.67 ± 0.08	0.17	Nal_WBC	RE, Northern Is.
EN00412	Adult	Male	23-Jul-2012	2.84 ± 0.08	0.17	Nal_WBC	RE, Northern Is.
EN00412	Adult	Male	10-Oct-2012	2.20 ± 0.06	0.16	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00412	Adult	Male	2-Nov-2012	2.41 ± 0.07	0.16	Nal_WBC	RE, Northern Is.
EN00414	Adult	Male	13-Oct-2011	0.00	0.11	Nal_WBC	RE
EN00414	Adult	Male	6-Feb-2012	0.15 ± 0.01	0.13	Nal_WBC	RE
EN00414	Adult	Male	24-Feb-2012	1.60 ± 0.05	0.15	Nal_WBC	RE
EN00414	Adult	Male	16-Aug-2012	0.83 ± 0.08	0.36	Nal_WBC	RE
EN00415	Adult	Male	16-Feb-2010	0.04 ± 0.02	0.09	Nal_WBC	RE, Northern Is.
EN00415	Adult	Male	8-Apr-2010	0.05 ± 0.02	0.09	Nal_WBC	RE, Northern Is.
EN00415	Adult	Male	10-May-2010	0.46 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00415	Adult	Male	20-Oct-2010	0.41 ± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00415	Adult	Male	3-Mar-2011	0.73 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00415	Adult	Male	15-Apr-2011	0.71 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00415	Adult	Male	2-May-2011	0.67 ± 0.05	0.22	Nal_WBC	RE, Northern Is.
EN00415	Adult	Male	2-Jun-2011	0.92 ± 0.08	0.32	Nal_WBC	RE, Northern Is.
EN00422	Adult	Male	29-Jan-2010	0.00	0.06	Nal_WBC	RE
EN00422	Adult	Male	9-Apr-2010	0.00	0.06	Nal_WBC	RE
EN00422	Adult	Male	3-Mar-2011	0.04 ± 0.02	0.09	Nal_WBC	RE, Northern Is.
EN00422	Adult	Male	19-Mar-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00422	Adult	Male	24-Apr-2012	0.08 ± 0.01	0.13	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00422	Adult	Male	9-Jul-2012	0.00	0.11	Nal_WBC	RE, Northern Is.
EN00425	Adult	Male	8-Apr-2011	0.41 ± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN00425	Adult	Male	24-Jun-2011	0.54 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00425	Adult	Male	15-Jul-2011	0.57 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00425	Adult	Male	5-Jul-2012	0.24 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00425	Adult	Male	30-Nov-2012	0.49 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00426	Adult	Male	14-May-2010	0.19 ± 0.04	0.16	Nal_WBC	RE
EN00426	Adult	Male	9-Aug-2010	0.60 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00426	Adult	Male	11-Apr-2011	0.87 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00426	Adult	Male	11-May-2011	0.67 ± 0.05	0.21	Nal_WBC	RE, Northern Is.
EN00426	Adult	Male	27-Jun-2011	0.59 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00426	Adult	Male	6-Jul-2011	0.64 ± 0.04	0.14	Nal_WBC	RE, Northern Is.
EN00426	Adult	Male	18-Jan-2012	0.00	0.12	Nal_WBC	RE
EN00429	Adult	Male	26-Sep-2011	0.00	0.11	Nal_WBC	RE
EN00430	Adult	Female	16-Apr-2010	0.26 ± 0.03	0.15	Nal_WBC	RE
EN00431	Adult	Female	11-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00432	Adult	Female	6-Oct-2010	0.00	0.06	Nal_WBC	RE
EN00432	Adult	Female	2-Feb-2012	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00434	Adult	Male	16-Sep-2010	0.12 ± 0.03	0.13	Nal_WBC	RE
EN00434	Adult	Male	13-May-2011	0.20 ± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN00434	Adult	Male	4-Oct-2011	0.00	0.12	Nal_WBC	RE, Northern Is.
EN00434	Adult	Male	12-Apr-2012	0.19 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00434	Adult	Male	5-Jul-2012	0.00	0.12	Nal_WBC	RE, Northern Is.
EN00438	Adult	Female	23-Mar-2010	0.00	0.06	Nal_WBC	RE
EN00438	Adult	Female	12-Oct-2010	0.04 ± 0.02	0.08	Nal_WBC	RE
EN00438	Adult	Female	29-Apr-2011	0.00	0.06	Nal_WBC	RE
EN00438	Adult	Female	2-Feb-2012	0.00	0.06	Nal_WBC	RE
EN00439	Adult	Female	31-Aug-2010	0.03 ± 0.02	0.09	Nal_WBC	RE
EN00439	Adult	Female	29-Apr-2011	0.00	0.06	Nal_WBC	RE
EN00439	Adult	Female	11-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00440	Adult	Female	13-Apr-2010	0.00	0.06	Nal_WBC	RE
EN00441	Adult	Male	12-Mar-2010	0.16 ± 0.04	0.19	Nal_WBC	RE
EN00441	Adult	Male	18-Mar-2010	0.11 ± 0.03	0.11	Nal_WBC	RE
EN00441	Adult	Male	22-Mar-2012	0.00	0.07	Nal_WBC	RE
EN00448	Adult	Male	12-Feb-2010	0.05 ± 0.02	0.08	Nal_WBC	RE
EN00448	Adult	Male	12-Aug-2010	0.46 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00448	Adult	Male	3-Mar-2011	0.20 ± 0.03	0.11	Nal_WBC	RE, Northern Is.

EN00448	Adult	Male	1-Aug-2012	0.99	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00448	Adult	Male	20-Sep-2012	0.64	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00449	Adult	Female	13-Feb-2010	0.00		0.06	Nal_WBC	RE
EN00449	Adult	Female	6-Aug-2010	0.09	± 0.02	0.09	Nal_WBC	RE
EN00449	Adult	Female	27-Oct-2011	0.00		0.11	Nal_WBC	RE
EN00449	Adult	Female	23-Jan-2012	0.00		0.06	Nal_WBC	RE
EN00449	Adult	Female	1-Aug-2012	0.00		0.11	Nal_WBC	RE
EN00449	Adult	Female	4-Dec-2012	0.00		0.05	Nal_WBC	RE, Northern Is.
EN00453	Adult	Female	8-Apr-2010	0.00		0.06	Nal_WBC	RE
EN00453	Adult	Female	6-Jun-2011	0.00		0.06	Nal_WBC	RE
EN00453	Adult	Female	23-Apr-2012	0.00		0.06	Nal_WBC	RE
EN00460	Adult	Male	8-Sep-2011	0.00		0.11	Nal_WBC	RE
EN00465	Adult	Male	12-May-2010	0.00		0.06	Nal_WBC	RE
EN00465	Adult	Male	11-Nov-2010	0.27	± 0.04	0.20	Nal_WBC	RE, Northern Is.
EN00465	Adult	Male	12-May-2011	0.39	± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00465	Adult	Male	12-Jul-2011	0.83	± 0.05	0.22	Nal_WBC	RE, Northern Is.
EN00465	Adult	Male	4-Aug-2011	0.86	± 0.08	0.33	Nal_WBC	RE, Northern Is.
EN00465	Adult	Male	21-Jun-2012	0.40	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00465	Adult	Male	12-Jul-2012	0.46	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00466	Adult	Female	31-Aug-2010	0.00		0.06	Nal_WBC	RE
EN00467	Adult	Male	16-Apr-2010	0.23	± 0.04	0.27	Nal_WBC	RE
EN00474	Adult	Female	8-Feb-2010	0.00		0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00474	Adult	Female	30-Mar-2011	0.00	0.06	Nal_WBC	RE
EN00474	Adult	Female	17-Jan-2012	0.10 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00479	Adult	Female	19-Feb-2010	0.03 ± 0.02	0.08	Nal_WBC	RE
EN00479	Adult	Female	26-May-2010	0.11 ± 0.02	0.08	Nal_WBC	RE, Northern Is.
EN00479	Adult	Female	11-Aug-2010	0.37 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00479	Adult	Female	27-May-2011	0.00	0.06	Nal_WBC	RE
EN00479	Adult	Female	8-Nov-2012	0.00	0.06	Nal_WBC	RE
EN00480	Adult	Female	6-Aug-2010	0.00	0.06	Nal_WBC	RE
EN00482	Adult	Male	9-Apr-2010	0.04 ± 0.02	0.11	Nal_WBC	RE
EN00482	Adult	Male	22-Mar-2011	0.53 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00482	Adult	Male	17-May-2011	0.56 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00482	Adult	Male	18-Jun-2011	0.41 ± 0.07	0.34	Nal_WBC	RE, Northern Is.
EN00482	Adult	Male	30-Mar-2012	0.08 ± 0.01	0.13	Nal_WBC	RE
EN00482	Adult	Male	2-May-2012	0.99 ± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00483	Adult	Male	1-Feb-2012	0.00	0.06	Nal_WBC	RE
EN00484	Adult	Female	1-Feb-2012	0.00	0.06	Nal_WBC	RE
EN00485	Adult	Female	6-Aug-2010	0.55 ± 0.04	0.17	Nal_WBC	RE
EN00485	Adult	Female	17-May-2011	0.43 ± 0.04	0.16	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00485	Adult	Female	16-Apr-2012	0.16	± 0.01	0.13	Nal_WBC	RE
EN00486	Adult	Male	27-Sep-2010	0.85	± 0.09	0.39	Nal_WBC	RE
EN00486	Adult	Male	17-May-2011	0.46	± 0.04	0.15	Nal_WBC	RE
EN00486	Adult	Male	17-Apr-2012	0.24	± 0.01	0.14	Nal_WBC	RE
EN00486	Adult	Male	30-Jul-2012	0.41	± 0.02	0.14	Nal_WBC	RE
EN00486	Adult	Male	17-Sep-2012	0.26	± 0.02	0.14	Nal_WBC	RE
EN00486	Adult	Male	24-Oct-2012	0.39	± 0.02	0.13	Nal_WBC	RE
EN00486	Adult	Male	29-Nov-2012	0.30	± 0.02	0.13	Nal_WBC	RE
EN00487	Adult	Female	15-Sep-2010	0.00		0.06	Nal_WBC	RE
EN00487	Adult	Female	1-Mar-2011	0.25	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00487	Adult	Female	9-Feb-2012	0.32	± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00487	Adult	Female	22-Mar-2012	0.21	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00487	Adult	Female	9-May-2012	0.99	± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00487	Adult	Female	8-Aug-2012	0.36	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00487	Adult	Female	9-Nov-2012	0.36	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00488	Adult	Male	15-Sep-2010	0.00		0.06	Nal_WBC	RE
EN00488	Adult	Male	1-Mar-2011	0.54	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00488	Adult	Male	9-Feb-2012	0.32	± 0.02	0.14	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00488	Adult	Male	22-Mar-2012	0.28 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00488	Adult	Male	9-May-2012	0.55 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00488	Adult	Male	18-Jul-2012	0.49 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00488	Adult	Male	9-Nov-2012	0.39 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00491	Adult	Female	16-Sep-2010	0.23 ± 0.04	0.16	Nal_WBC	RE
EN00493	Adult	Male	6-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00493	Adult	Male	29-Jun-2012	0.10 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00498	Adult	Female	22-Feb-2012	0.00	0.06	Nal_WBC	RE
EN00504	Adult	Male	22-Mar-2010	0.07 ± 0.02	0.11	Nal_WBC	RE
EN00504	Adult	Male	16-Feb-2012	0.00	0.06	Nal_WBC	RE
EN00504	Adult	Male	24-Oct-2012	0.06 ± 0.01	0.14	Nal_WBC	RE
EN00512	Adult	Male	9-Sep-2010	0.40 ± 0.04	0.16	Nal_WBC	RE
EN00512	Adult	Male	17-Feb-2012	0.16 ± 0.01	0.14	Nal_WBC	RE
EN00512	Adult	Male	9-Jul-2012	0.46 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00512	Adult	Male	3-Aug-2012	1.38 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00517	Adult	Male	15-Jan-2010	0.00	0.06	Nal_WBC	RE
EN00517	Adult	Male	9-Apr-2010	0.06 ± 0.02	0.09	Nal_WBC	RE
EN00517	Adult	Male	11-Oct-2010	0.13 ± 0.02	0.11	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00517	Adult	Male	1-Nov-2010	0.19 ± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00517	Adult	Male	21-Mar-2011	0.13 ± 0.03	0.16	Nal_WBC	RE
EN00517	Adult	Male	8-Apr-2011	0.43 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00517	Adult	Male	17-Feb-2012	0.09 ± 0.01	0.12	Nal_WBC	RE
EN00517	Adult	Male	10-May-2012	1.51 ± 0.05	0.15	Nal_WBC	RE, Northern Is.
EN00517	Adult	Male	11-Jul-2012	1.25 ± 0.09	0.37	Nal_WBC	RE, Northern Is.
EN00522	Adult	Male	13-Mar-2010	0.00	0.11	Nal_WBC	RE
EN00522	Adult	Male	8-Apr-2010	0.00	0.06	Nal_WBC	RE
EN00522	Adult	Male	9-May-2012	1.10 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00522	Adult	Male	19-Jun-2012	0.68 ± 0.02	0.15	Nal_WBC	RE, Northern Is.
EN00522	Adult	Male	16-Aug-2012	0.49 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00523	Adult	Female	6-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00523	Adult	Female	11-Jun-2011	0.00	0.11	Nal_WBC	NR
EN00523	Adult	Female	31-Jan-2012	0.17 ± 0.01	0.13	Nal_WBC	RE
EN00523	Adult	Female	8-Aug-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00523	Adult	Female	1-Nov-2012	0.08 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00526	Adult	Male	27-Feb-2010	0.00	0.10	Nal_WBC	NR
EN00526	Adult	Male	21-Sep-2011	0.00	0.10	Nal_WBC	NR

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00526	Adult	Male	23-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00529	Adult	Male	14-Aug-2010	0.09 ± 0.04	0.18	Nal_WBC	NR
EN00529	Adult	Male	21-Sep-2011	0.00	0.11	Nal_WBC	RE
EN00529	Adult	Male	17-Jan-2012	0.00	0.06	Nal_WBC	RE
EN00532	Adult	Male	18-Jan-2010	0.00	0.06	Nal_WBC	RE
EN00532	Adult	Male	13-Mar-2010	0.00	0.11	Nal_WBC	RE
EN00532	Adult	Male	3-Jul-2010	0.00	0.11	Nal_WBC	RE
EN00532	Adult	Male	12-Aug-2010	0.84 ± 0.44	2.02	Nal_WBC	RE
EN00532	Adult	Male	8-Nov-2010	0.52 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00532	Adult	Male	11-Apr-2011	0.50 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00532	Adult	Male	17-Jan-2012	0.38 ± 0.02	0.20	Nal_WBC	RE
EN00532	Adult	Male	14-Aug-2012	0.76 ± 0.03	0.14	Nal_WBC	RE
EN00536	Teenager	Male	15-Aug-2012	0.00	0.11	Nal_WBC	RE
EN00536	Teenager	Male	17-Sep-2012	0.00	0.05	Nal_WBC	RE, Northern Is.
EN00536	Teenager	Male	1-Oct-2012	0.22 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00536	Teenager	Male	16-Oct-2012	0.49 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00536	Adult	Male	14-Nov-2012	0.48 ± 0.02	0.15	Nal_WBC	RE, Northern Is.
EN00538	Adult	Female	14-Apr-2010	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00540	Adult	Male	18-Feb-2010	0.09	± 0.02	0.11	Nal_WBC	RE
EN00540	Adult	Male	9-Apr-2010	0.08	± 0.02	0.11	Nal_WBC	RE
EN00540	Adult	Male	17-Mar-2011	0.43	± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00540	Adult	Male	28-May-2011	0.43	± 0.07	0.33	Nal_WBC	RE, Northern Is.
EN00540	Adult	Male	3-Feb-2012	0.19	± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00540	Adult	Male	22-Mar-2012	0.24	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00540	Adult	Male	21-May-2012	0.48	± 0.02	0.15	Nal_WBC	RE, Northern Is.
EN00540	Adult	Male	21-Jun-2012	0.82	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00540	Adult	Male	12-Jul-2012	0.73	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00540	Adult	Male	16-Aug-2012	0.59	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00540	Adult	Male	12-Sep-2012	0.62	± 0.08	0.35	Nal_WBC	RE, Northern Is.
EN00540	Adult	Male	21-Nov-2012	0.32	± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00541	Adult	Male	5-Dec-2012	0.00		0.05	Nal_WBC	RE
EN00542	Adult	Male	28-Jan-2010	0.00		0.07	Nal_WBC	RE
EN00542	Adult	Male	5-Mar-2010	0.03	± 0.02	0.08	Nal_WBC	RE, Northern Is.
EN00542	Adult	Male	7-May-2010	0.09	± 0.02	0.09	Nal_WBC	RE, Northern Is.
EN00542	Adult	Male	7-May-2010	0.27	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00542	Adult	Male	10-May-2010	0.17	± 0.03	0.13	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00542	Adult	Male	17-May-2010	0.15	± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00542	Adult	Male	21-Jun-2010	0.23	± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN00542	Adult	Male	4-Apr-2011	0.42	± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00542	Adult	Male	16-Jun-2011	0.29	± 0.03	0.12	Nal_WBC	RE, Northern Is.
EN00542	Adult	Male	11-Jul-2011	0.74	± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00542	Adult	Male	13-Feb-2012	0.36	± 0.02	0.14	Nal_WBC	RE
EN00542	Adult	Male	20-Mar-2012	0.29	± 0.02	0.14	Nal_WBC	RE
EN00543	Adult	Male	9-Apr-2010	0.00		0.06	Nal_WBC	RE
EN00543	Adult	Male	1-Mar-2011	0.69	± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00543	Adult	Male	11-Apr-2011	0.47	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00543	Adult	Male	30-Jan-2012	0.24	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00543	Adult	Male	9-Aug-2012	1.27	± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00544	Adult	Male	6-Apr-2011	0.03	± 0.02	0.10	Nal_WBC	RE
EN00545	Adult	Male	23-Sep-2010	0.71	± 0.04	0.17	Nal_WBC	RE
EN00545	Adult	Male	21-Mar-2011	0.44	± 0.03	0.15	Nal_WBC	RE
EN00545	Adult	Male	9-Jun-2011	0.23	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00545	Adult	Male	23-Mar-2012	0.20	± 0.01	0.13	Nal_WBC	RE
EN00545	Adult	Male	13-Jul-2012	0.16	± 0.01	0.14	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00545	Adult	Male	13-Aug-2012	0.64 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00553	Adult	Male	1-Aug-2011	0.00	0.10	Nal_WBC	NR
EN00558	Adult	Female	24-Mar-2010	0.00	0.06	Nal_WBC	RE
EN00558	Adult	Female	12-Oct-2010	0.08 ± 0.03	0.15	Nal_WBC	RE
EN00558	Adult	Female	26-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00559	Adult	Male	7-Aug-2010	0.00	0.11	Nal_WBC	NR
EN00559	Adult	Male	2-Jul-2011	0.37 ± 0.07	0.30	Nal_WBC	NR
EN00561	Adult	Male	3-Mar-2011	0.14 ± 0.02	0.11	Nal_WBC	RE, Northern Is.
EN00569	Adult	Male	5-Aug-2010	0.00	0.06	Nal_WBC	RE
EN00569	Adult	Male	21-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00569	Adult	Male	27-Oct-2010	0.00	0.06	Nal_WBC	RE
EN00569	Adult	Male	1-Mar-2011	1.24 ± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00569	Adult	Male	20-Oct-2011	0.00	0.12	Nal_WBC	RE, Northern Is.
EN00571	Adult	Male	18-Feb-2010	0.04 ± 0.02	0.07	Nal_WBC	RE
EN00571	Adult	Male	11-Aug-2010	0.06 ± 0.02	0.08	Nal_WBC	RE, Northern Is.
EN00571	Adult	Male	3-Mar-2011	0.34 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00571	Adult	Male	28-May-2011	0.00	0.11	Nal_WBC	RE, Northern Is.
EN00572	Adult	Male	16-Jan-2010	0.00	0.10	Nal_WBC	NR

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00572	Adult	Male	6-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00572	Adult	Male	13-Oct-2011	0.00	0.11	Nal_WBC	NR
EN00572	Adult	Male	18-Jul-2012	0.52 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00572	Adult	Male	16-Oct-2012	0.76 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00573	Adult	Male	23-Mar-2010	0.08 ± 0.02	0.09	Nal_WBC	RE
EN00573	Adult	Male	3-Mar-2011	0.51 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00573	Adult	Male	25-Mar-2011	0.57 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00573	Adult	Male	14-Apr-2011	0.92 ± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00573	Adult	Male	2-Jun-2011	0.72 ± 0.08	0.34	Nal_WBC	RE, Northern Is.
EN00575	Adult	Female	17-Sep-2011	0.00	0.10	Nal_WBC	RE
EN00576	Adult	Female	1-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00576	Adult	Female	11-Nov-2010	0.00	0.06	Nal_WBC	RE
EN00576	Adult	Female	13-Apr-2011	0.00	0.06	Nal_WBC	RE
EN00576	Adult	Female	4-Oct-2012	0.00	0.06	Nal_WBC	RE
EN00577	Teenager	Male	29-Jan-2010	0.00	0.06	Nal_WBC	RE
EN00577	Teenager	Male	13-Apr-2010	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00577	Teenager	Male	5-Aug-2010	0.19 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00577	Adult	Male	9-Sep-2010	0.00	0.06	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00577	Adult	Male	23-Jun-2011	0.42	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00577	Adult	Male	18-Jan-2012	0.26	± 0.01	0.13	Nal_WBC	RE
EN00577	Adult	Male	11-May-2012	2.04	± 0.06	0.15	Nal_WBC	RE, Northern Is.
EN00577	Adult	Male	10-Jul-2012	1.67	± 0.10	0.36	Nal_WBC	RE, Northern Is.
EN00580	Adult	Male	7-Aug-2010	0.00		0.10	Nal_WBC	NR
EN00580	Adult	Male	3-Mar-2011	0.15	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00580	Adult	Male	25-Mar-2011	0.26	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00580	Adult	Male	14-Apr-2011	0.43	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00580	Adult	Male	2-Jun-2011	0.28	± 0.06	0.28	Nal_WBC	RE, Northern Is.
EN00580	Adult	Male	3-Jan-2012	0.10	± 0.01	0.13	Nal_WBC	RE
EN00580	Adult	Male	23-Mar-2012	0.06	± 0.01	0.13	Nal_WBC	RE
EN00580	Adult	Male	2-May-2012	0.08	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00580	Adult	Male	1-Oct-2012	0.08	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00580	Adult	Male	14-Nov-2012	0.19	± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00581	Teenager	Male	15-Jan-2010	0.13	± 0.03	0.12	Nal_WBC	RE
EN00581	Teenager	Male	24-Feb-2010	0.08	± 0.03	0.16	Nal_WBC	RE
EN00581	Adult	Male	14-Jun-2010	0.47	± 0.04	0.16	Nal_WBC	RE
EN00581	Adult	Male	25-Oct-2010	0.10	± 0.02	0.11	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00581	Adult	Male	3-Mar-2011	0.54 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00581	Adult	Male	11-Jun-2011	0.17 ± 0.05	0.23	Nal_WBC	RE, Northern Is.
EN00581	Adult	Male	22-Feb-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00581	Adult	Male	2-Nov-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00582	Adult	Female	17-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00584	Adult	Female	29-Jul-2010	0.00	0.06	Nal_WBC	RE
EN00584	Adult	Female	28-Apr-2011	0.04 ± 0.02	0.09	Nal_WBC	RE
EN00584	Adult	Female	24-Jan-2012	0.00	0.06	Nal_WBC	RE
EN00584	Adult	Female	21-Mar-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00584	Adult	Female	4-Oct-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00585	Adult	Female	13-Apr-2011	0.17 ± 0.03	0.13	Nal_WBC	RE
EN00586	Adult	Female	26-May-2010	0.00	0.06	Nal_WBC	RE
EN00586	Adult	Female	6-Apr-2011	0.00	0.06	Nal_WBC	RE
EN00588	Adult	Male	14-Apr-2011	0.00	0.06	Nal_WBC	RE
EN00588	Adult	Male	17-Jan-2012	0.00	0.06	Nal_WBC	RE
EN00588	Adult	Male	10-May-2012	0.59 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00588	Adult	Male	8-Oct-2012	0.22 ± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00590	Adult	Female	27-Jan-2010	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00590	Adult	Female	5-Aug-2010	0.10	± 0.04	0.18	Nal_WBC	RE
EN00590	Adult	Female	2-Mar-2011	0.33	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00590	Adult	Female	6-Apr-2011	0.41	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00590	Adult	Female	27-May-2011	0.47	± 0.08	0.34	Nal_WBC	RE, Northern Is.
EN00590	Adult	Female	17-Aug-2012	0.00		0.10	Nal_WBC	RE
EN00590	Adult	Female	30-Nov-2012	0.00		0.10	Nal_WBC	NR
EN00591	Adult	Female	2-Sep-2010	0.00		0.06	Nal_WBC	RE
EN00591	Adult	Female	14-Apr-2011	0.00		0.06	Nal_WBC	RE, Northern Is.
EN00591	Adult	Female	15-Jul-2011	0.00		0.10	Nal_WBC	RE, Northern Is.
EN00591	Adult	Female	31-Oct-2012	0.00		0.05	Nal_WBC	RE
EN00595	Teenager	Male	16-Jan-2010	0.00		0.10	Nal_WBC	NR
EN00596	Adult	Male	7-Sep-2010	0.04	± 0.02	0.09	Nal_WBC	RE
EN00596	Adult	Male	22-Mar-2011	0.51	± 0.04	0.19	Nal_WBC	RE, Northern Is.
EN00596	Adult	Male	20-Apr-2011	0.75	± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00596	Adult	Male	14-Feb-2012	0.24	± 0.01	0.14	Nal_WBC	RE
EN00596	Adult	Male	13-Jun-2012	0.23	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00596	Adult	Male	13-Jul-2012	0.10	± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00596	Adult	Male	14-Aug-2012	0.21	± 0.01	0.13	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00598	Teenager	Male	9-Apr-2010	0.00	0.06	Nal_WBC	RE
EN00598	Teenager	Male	18-Sep-2010	0.00	0.11	Nal_WBC	RE
EN00598	Teenager	Male	21-Mar-2011	0.00	0.06	Nal_WBC	RE
EN00598	Teenager	Male	1-Aug-2011	0.46 ± 0.07	0.30	Nal_WBC	RE
EN00598	Teenager	Male	27-Sep-2011	0.00	0.12	Nal_WBC	RE
EN00598	Adult	Male	2-May-2012	0.44 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00598	Adult	Male	20-Jun-2012	0.68 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00598	Adult	Male	19-Nov-2012	0.91 ± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00602	Adult	Male	13-Oct-2011	0.00	0.11	Nal_WBC	RE
EN00602	Adult	Male	14-Feb-2012	0.00	0.06	Nal_WBC	RE
EN00602	Adult	Male	9-May-2012	1.22 ± 0.04	0.14	Nal_WBC	RE, Northern Is.
EN00602	Adult	Male	4-Jul-2012	0.56 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00602	Adult	Male	17-Aug-2012	0.51 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00602	Adult	Male	19-Nov-2012	0.34 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00603	Adult	Male	14-Feb-2012	0.05 ± 0.01	0.13	Nal_WBC	RE
EN00605	Teenager	Male	22-Mar-2010	0.00	0.06	Nal_WBC	RE
EN00605	Teenager	Male	10-May-2010	0.25 ± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN00605	Adult	Male	1-Apr-2011	0.52 ± 0.04	0.18	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00605	Adult	Male	11-Apr-2011	0.53	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00605	Adult	Male	7-Jun-2011	0.60	± 0.07	0.32	Nal_WBC	RE, Northern Is.
EN00605	Adult	Male	1-Aug-2012	0.00		0.11	Nal_WBC	RE
EN00605	Adult	Male	15-Aug-2012	0.00		0.11	Nal_WBC	RE
EN00608	Teenager	Female	31-Aug-2010	0.00		0.06	Nal_WBC	RE
EN00608	Adult	Female	25-Jan-2012	0.00		0.06	Nal_WBC	RE
EN00608	Adult	Female	1-Nov-2012	0.15	± 0.01	0.12	Nal_WBC	RE
EN00613	Adult	Male	6-Sep-2010	0.00		0.07	Nal_WBC	RE
EN00613	Adult	Male	26-Jul-2011	0.47	± 0.07	0.30	Nal_WBC	RE
EN00613	Adult	Male	10-May-2012	1.57	± 0.05	0.15	Nal_WBC	RE, Northern Is.
EN00613	Adult	Male	3-Jul-2012	0.92	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00614	Teenager	Male	9-Jun-2010	0.11	± 0.02	0.11	Nal_WBC	RE
EN00615	Teenager	Male	21-Jan-2010	0.00		0.07	Nal_WBC	RE, Northern Is.
EN00615	Teenager	Male	12-Apr-2010	0.00		0.06	Nal_WBC	RE, Northern Is.
EN00615	Teenager	Male	10-May-2010	0.52	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00615	Teenager	Male	3-Mar-2011	0.77	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00615	Teenager	Male	23-Mar-2011	0.60	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00615	Adult	Male	2-Apr-2012	0.21	± 0.01	0.13	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00615	Adult	Male	3-Jul-2012	0.17 ± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00616	Adult	Male	10-Sep-2012	0.00	0.05	Nal_WBC	RE
EN00616	Adult	Male	13-Nov-2012	0.00	0.06	Nal_WBC	RE
EN00618	Teenager	Male	10-Sep-2012	0.00	0.05	Nal_WBC	RE
EN00619	Teenager	Male	16-Feb-2010	0.68 ± 0.05	0.23	Nal_WBC	RE
EN00619	Teenager	Male	16-Feb-2010	0.70 ± 0.04	0.17	Nal_WBC	RE
EN00619	Teenager	Male	10-Apr-2010	0.51 ± 0.04	0.18	Nal_WBC	RE
EN00619	Teenager	Male	10-May-2010	0.53 ± 0.04	0.18	Nal_WBC	RE
EN00619	Teenager	Male	14-Jun-2010	0.68 ± 0.05	0.21	Nal_WBC	RE
EN00619	Teenager	Male	28-Aug-2010	0.70 ± 0.08	0.35	Nal_WBC	RE
EN00620	Teenager	Female	21-Sep-2011	0.00	0.10	Nal_WBC	RE
EN00623	Teenager	Female	14-Apr-2011	0.00	0.06	Nal_WBC	RE
EN00628	Teenager	Female	17-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00631	Adult	Female	21-Sep-2012	0.00	0.05	Nal_WBC	RE
EN00634	Teenager	Male	21-Jun-2010	0.26 ± 0.04	0.16	Nal_WBC	RE
EN00634	Teenager	Male	23-Jul-2010	0.56 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00634	Teenager	Male	28-Mar-2011	0.51 ± 0.04	0.18	Nal_WBC	RE
EN00634	Teenager	Male	18-Apr-2011	0.72 ± 0.05	0.19	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00634	Teenager	Male	2-Jul-2011	0.75 ± 0.08	0.37	Nal_WBC	RE, Northern Is.
EN00634	Teenager	Male	18-Jan-2012	0.15 ± 0.01	0.13	Nal_WBC	RE
EN00634	Teenager	Male	6-Feb-2012	0.11 ± 0.01	0.14	Nal_WBC	RE
EN00634	Teenager	Male	26-Jun-2012	0.20 ± 0.07	0.30	Nal_WBC	RE
EN00634	Adult	Male	29-Oct-2012	0.26 ± 0.01	0.13	Nal_WBC	RE
EN00634	Adult	Male	22-Nov-2012	0.20 ± 0.01	0.13	Nal_WBC	RE
EN00640	Teenager	Female	1-Oct-2011	0.00	0.10	Nal_WBC	NR
EN00640	Teenager	Female	10-Jul-2012	0.00	0.10	Nal_WBC	RE
EN00643	Teenager	Female	26-Jun-2010	0.00	0.10	Nal_WBC	NR
EN00645	Teenager	Male	14-Aug-2010	0.10 ± 0.04	0.19	Nal_WBC	RE
EN00645	Teenager	Male	25-Sep-2012	0.00	0.05	Nal_WBC	RE, Northern Is.
EN00646	Adult	Male	20-Sep-2012	0.00	0.05	Nal_WBC	RE, Northern Is.
EN00653	Teenager	Male	26-Jun-2012	0.00	0.11	Nal_WBC	NR
EN00653	Teenager	Male	17-Oct-2012	0.11 ± 0.01	0.13	Nal_WBC	RE
EN00658	Teenager	Female	7-Aug-2010	0.00	0.10	Nal_WBC	RE
EN00662	Teenager	Female	25-Jun-2010	0.13 ± 0.03	0.12	Nal_WBC	RE
EN00667	Teenager	Female	25-Jun-2010	0.00	0.06	Nal_WBC	RE
EN00672	Teenager	Female	2-Nov-2012	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00673	Teenager	Male	26-Jun-2012	0.00	0.11	Nal_WBC	RE
EN00677	Teenager	Male	10-May-2010	0.07 ± 0.02	0.11	Nal_WBC	RE
EN00677	Teenager	Male	13-May-2010	0.09 ± 0.02	0.11	Nal_WBC	RE
EN00688	Teenager	Male	26-Jun-2012	0.00	0.11	Nal_WBC	RE
EN00693	Adult	Female	16-Sep-2010	0.08 ± 0.02	0.10	Nal_WBC	RE
EN00693	Adult	Female	10-May-2011	0.06 ± 0.02	0.09	Nal_WBC	RE
EN00693	Adult	Female	11-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00693	Adult	Female	11-May-2012	0.89 ± 0.03	0.15	Nal_WBC	RE
EN00693	Adult	Female	3-Aug-2012	0.53 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00698	Teenager	Female	1-Aug-2012	0.00	0.11	Nal_WBC	RE
EN00701	Pre-Teenager	Male	2-May-2011	0.08 ± 0.02	0.09	Nal_WBC	RE
EN00701	Teenager	Male	21-Jun-2012	0.20 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00701	Teenager	Male	20-Jul-2012	0.31 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00701	Teenager	Male	2-Aug-2012	0.80 ± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00703	Teenager	Female	23-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00708	Adult	Male	8-Aug-2011	0.65 ± 0.07	0.32	Nal_WBC	RE
EN00708	Adult	Male	5-Jul-2012	0.25 ± 0.06	0.26	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00709	Adult	Female	17-Sep-2010	0.09 ± 0.03	0.16	Nal_WBC	RE
EN00709	Adult	Female	26-Sep-2011	0.00	0.11	Nal_WBC	RE
EN00709	Adult	Female	11-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00724	Adult	Female	16-Feb-2012	0.00	0.06	Nal_WBC	RE
EN00728	Adult	Male	2-Nov-2012	0.28 ± 0.01	0.14	Nal_WBC	RE
EN00730	Adult	Male	11-Jan-2012	0.00	0.06	Nal_WBC	RE
EN00730	Adult	Male	14-Dec-2012	0.13 ± 0.01	0.13	Nal_WBC	RE
EN00732	Adult	Female	14-Apr-2010	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00732	Adult	Female	9-Sep-2010	0.06 ± 0.02	0.09	Nal_WBC	RE, Northern Is.
EN00732	Adult	Female	14-Jun-2011	0.00	0.06	Nal_WBC	RE
EN00732	Adult	Female	19-Jan-2012	0.10 ± 0.01	0.12	Nal_WBC	RE, Northern Is.
EN00732	Adult	Female	31-Jul-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00734	Adult	Male	26-Feb-2010	0.09 ± 0.02	0.10	Nal_WBC	RE
EN00734	Adult	Male	25-Mar-2010	0.12 ± 0.02	0.11	Nal_WBC	RE
EN00734	Adult	Male	22-Jun-2010	0.32 ± 0.03	0.18	Nal_WBC	RE
EN00734	Adult	Male	25-Aug-2010	0.57 ± 0.04	0.16	Nal_WBC	RE
EN00734	Adult	Male	20-Sep-2010	0.49 ± 0.05	0.21	Nal_WBC	RE
EN00734	Adult	Male	28-Oct-2010	0.64 ± 0.04	0.18	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00734	Adult	Male	23-Mar-2011	0.47 ± 0.04	0.16	Nal_WBC	RE
EN00734	Adult	Male	18-May-2011	0.57 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00734	Adult	Male	8-Jul-2011	0.78 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00734	Adult	Male	23-May-2012	0.00	0.06	Nal_WBC	RE
EN00735	Adult	Male	29-Jan-2010	0.14 ± 0.04	0.18	Nal_WBC	RE
EN00735	Adult	Male	14-Apr-2010	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00735	Adult	Male	9-Sep-2010	0.21 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00735	Adult	Male	4-Jun-2011	0.00	0.12	Nal_WBC	RE
EN00735	Adult	Male	1-Feb-2012	0.00	0.06	Nal_WBC	RE
EN00735	Adult	Male	20-Feb-2012	0.35 ± 0.02	0.14	Nal_WBC	RE
EN00735	Adult	Male	26-Jun-2012	0.34 ± 0.06	0.29	Nal_WBC	RE
EN00735	Adult	Male	19-Nov-2012	0.23 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00736	Adult	Female	12-Nov-2010	0.41 ± 0.07	0.31	Nal_WBC	NR, Utr
EN00736	Adult	Female	4-Oct-2011	0.00	0.11	Nal_WBC	RE
EN00737	Adult	Female	8-Feb-2010	0.00	0.06	Nal_WBC	RE
EN00737	Adult	Female	16-Jun-2011	0.06 ± 0.02	0.10	Nal_WBC	RE
EN00737	Adult	Female	31-Jul-2012	0.00	0.06	Nal_WBC	RE
EN00739	Adult	Male	5-Feb-2010	0.43 ± 0.04	0.16	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00739	Adult	Male	19-Feb-2010	0.41 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00739	Adult	Male	3-Jun-2010	0.14 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00739	Adult	Male	27-Sep-2010	0.00	0.11	Nal_WBC	RE, Northern Is.
EN00741	Adult	Male	8-Jun-2011	0.21 ± 0.03	0.14	Nal_WBC	RE
EN00741	Adult	Male	24-Jun-2011	0.21 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00741	Adult	Male	20-Mar-2012	0.22 ± 0.01	0.14	Nal_WBC	RE
EN00741	Adult	Male	10-Oct-2012	1.12 ± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00741	Adult	Male	2-Nov-2012	1.57 ± 0.05	0.15	Nal_WBC	RE, Northern Is.
EN00742	Adult	Male	3-Jul-2010	0.00	0.11	Nal_WBC	NR
EN00742	Adult	Male	15-Sep-2010	0.00	0.10	Nal_WBC	NR
EN00750	Adult	Male	6-Mar-2010	0.00	0.11	Nal_WBC	RE
EN00750	Adult	Male	3-Jul-2010	0.00	0.11	Nal_WBC	RE
EN00750	Adult	Male	27-Oct-2010	0.00	0.06	Nal_WBC	RE
EN00750	Adult	Male	28-Jun-2011	0.04 ± 0.02	0.09	Nal_WBC	RE
EN00750	Adult	Male	16-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00750	Adult	Male	24-Jul-2012	0.00	0.06	Nal_WBC	RE
EN00750	Adult	Male	12-Sep-2012	0.00	0.06	Nal_WBC	RE
EN00750	Adult	Male	24-Oct-2012	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00752	Adult	Male	7-Sep-2010	0.07 ± 0.02	0.10	Nal_WBC	RE
EN00752	Adult	Male	10-Nov-2010	0.14 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00752	Adult	Male	21-Apr-2011	0.63 ± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00752	Adult	Male	16-Jan-2012	0.17 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00752	Adult	Male	19-Mar-2012	0.17 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00752	Adult	Male	10-Aug-2012	0.52 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00753	Adult	Male	1-Oct-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00753	Adult	Male	14-Nov-2012	0.12 ± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00754	Adult	Male	19-May-2010	0.14 ± 0.03	0.16	Nal_WBC	RE, Northern Is.
EN00754	Adult	Male	21-Mar-2011	0.40 ± 0.05	0.23	Nal_WBC	RE
EN00754	Adult	Male	8-Apr-2011	1.00 ± 0.06	0.23	Nal_WBC	RE, Northern Is.
EN00754	Adult	Male	11-Jun-2011	1.01 ± 0.08	0.35	Nal_WBC	RE, Northern Is.
EN00754	Adult	Male	3-Dec-2012	0.11 ± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00755	Adult	Female	2-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00755	Adult	Female	1-Oct-2011	0.00	0.10	Nal_WBC	RE
EN00755	Adult	Female	17-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00762	Adult	Male	15-Jan-2010	0.10 ± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00762	Adult	Male	23-Jul-2010	0.00	0.08	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00762	Adult	Male	23-Jul-2010	0.67	± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00762	Adult	Male	18-Apr-2011	0.56	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00762	Adult	Male	5-Jan-2012	0.13	± 0.01	0.13	Nal_WBC	RE
EN00762	Adult	Male	17-Feb-2012	0.39	± 0.02	0.13	Nal_WBC	RE
EN00762	Adult	Male	30-Mar-2012	0.23	± 0.02	0.14	Nal_WBC	RE
EN00762	Adult	Male	2-May-2012	0.43	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00762	Adult	Male	19-Jul-2012	0.66	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00762	Adult	Male	30-Oct-2012	0.40	± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00765	Adult	Male	4-Apr-2011	0.11	± 0.03	0.12	Nal_WBC	RE, Northern Is.
EN00765	Adult	Male	21-Jun-2011	0.48	± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00765	Adult	Male	8-Jul-2011	0.65	± 0.04	0.14	Nal_WBC	RE, Northern Is.
EN00765	Adult	Male	26-Jan-2012	0.11	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00765	Adult	Male	20-Feb-2012	0.68	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00766	Adult	Female	16-Feb-2010	0.00		0.06	Nal_WBC	RE
EN00766	Adult	Female	16-Jun-2011	0.00		0.06	Nal_WBC	RE
EN00766	Adult	Female	10-Jul-2012	0.08	± 0.01	0.13	Nal_WBC	RE
EN00771	Adult	Female	7-Sep-2010	0.08	± 0.02	0.09	Nal_WBC	RE
EN00771	Adult	Female	26-Jul-2011	0.00		0.11	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00771	Adult	Female	10-Feb-2012	0.00	0.06	Nal_WBC	RE
EN00775	Adult	Male	9-Feb-2010	0.07 ± 0.02	0.10	Nal_WBC	RE
EN00775	Adult	Male	12-Apr-2010	0.10 ± 0.04	0.17	Nal_WBC	RE
EN00775	Adult	Male	9-Sep-2010	0.50 ± 0.04	0.17	Nal_WBC	RE
EN00775	Adult	Male	1-Nov-2010	0.59 ± 0.04	0.16	Nal_WBC	RE
EN00775	Adult	Male	9-Jun-2011	0.25 ± 0.03	0.12	Nal_WBC	RE, Northern Is.
EN00775	Adult	Male	17-Jan-2012	0.27 ± 0.01	0.13	Nal_WBC	RE
EN00775	Adult	Male	25-Jun-2012	0.14 ± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00776	Adult	Male	12-Apr-2010	0.00	0.06	Nal_WBC	RE
EN00776	Adult	Male	16-May-2011	0.00	0.06	Nal_WBC	RE
EN00776	Adult	Male	4-Jun-2011	0.00	0.11	Nal_WBC	RE
EN00776	Adult	Male	24-Jan-2012	0.00	0.06	Nal_WBC	RE
EN00776	Adult	Male	19-Mar-2012	0.00	0.06	Nal_WBC	RE
EN00776	Adult	Male	3-May-2012	0.09 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00777	Adult	Male	19-May-2010	0.00	0.10	Nal_WBC	NR
EN00777	Adult	Male	7-Aug-2010	0.00	0.11	Nal_WBC	RE
EN00777	Adult	Male	19-Jan-2012	0.00	0.06	Nal_WBC	NR
EN00779	Adult	Female	2-Sep-2010	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00779	Adult	Female	19-Jan-2012	0.00	0.06	Nal_WBC	RE
EN00782	Adult	Male	27-Jul-2012	0.18 ± 0.01	0.13	Nal_WBC	RE, Utr
EN00783	Adult	Female	10-May-2010	0.00	0.10	Nal_WBC	NR
EN00783	Adult	Female	19-Apr-2011	0.28 ± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN00783	Adult	Female	27-Sep-2011	0.00	0.11	Nal_WBC	RE, Northern Is.
EN00783	Adult	Female	4-Oct-2012	0.00	0.06	Nal_WBC	RE
EN00784	Adult	Male	23-Feb-2010	0.06 ± 0.03	0.13	Nal_WBC	RE
EN00784	Adult	Male	24-Mar-2010	0.10 ± 0.03	0.16	Nal_WBC	RE
EN00784	Adult	Male	20-May-2010	0.06 ± 0.02	0.11	Nal_WBC	RE
EN00784	Adult	Male	21-Jun-2010	0.09 ± 0.03	0.13	Nal_WBC	RE
EN00784	Adult	Male	28-Oct-2010	0.10 ± 0.03	0.13	Nal_WBC	RE
EN00784	Adult	Male	18-May-2011	0.18 ± 0.03	0.12	Nal_WBC	RE, Northern Is.
EN00784	Adult	Male	28-Jun-2011	0.14 ± 0.02	0.10	Nal_WBC	RE, Northern Is.
EN00784	Adult	Male	20-Jan-2012	0.07 ± 0.01	0.13	Nal_WBC	RE
EN00784	Adult	Male	7-Feb-2012	0.00	0.06	Nal_WBC	RE
EN00784	Adult	Male	1-Aug-2012	0.75 ± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00793	Adult	Female	23-Mar-2010	0.00	0.06	Nal_WBC	RE
EN00793	Adult	Female	21-Apr-2011	0.13 ± 0.02	0.11	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00793	Adult	Female	4-Oct-2012	0.00	0.06	Nal_WBC	RE
EN00795	Adult	Male	9-Feb-2010	0.07 ± 0.02	0.09	Nal_WBC	RE
EN00795	Adult	Male	10-Apr-2010	0.00	0.06	Nal_WBC	RE
EN00795	Adult	Male	18-Apr-2011	0.54 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00795	Adult	Male	24-Feb-2012	0.28 ± 0.02	0.14	Nal_WBC	RE
EN00795	Adult	Male	30-Oct-2012	1.01 ± 0.03	0.14	Nal_WBC	RE
EN00795	Adult	Male	22-Nov-2012	0.70 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00801	Adult	Female	8-Mar-2012	0.00	0.06	Nal_WBC	RE
EN00805	Adult	Male	12-Jan-2010	0.00	0.06	Nal_WBC	RE
EN00805	Adult	Male	16-Mar-2010	0.00	0.06	Nal_WBC	RE
EN00805	Adult	Male	22-Feb-2011	0.00	0.11	Nal_WBC	RE
EN00805	Adult	Male	15-Apr-2011	0.39 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00805	Adult	Male	9-Oct-2012	0.17 ± 0.01	0.13	Nal_WBC	RE
EN00807	Adult	Male	21-Jan-2010	0.00	0.06	Nal_WBC	RE
EN00807	Adult	Male	9-Apr-2010	0.00	0.06	Nal_WBC	RE
EN00807	Adult	Male	11-Jun-2011	0.00	0.11	Nal_WBC	RE
EN00807	Adult	Male	22-Feb-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00807	Adult	Male	19-Apr-2012	0.00	0.06	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00807	Adult	Male	22-Jun-2012	0.22 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00808	Adult	Male	23-Oct-2010	0.13 ± 0.04	0.19	Nal_WBC	RE
EN00813	Adult	Female	15-Sep-2010	0.10 ± 0.02	0.11	Nal_WBC	RE
EN00813	Adult	Female	6-May-2011	0.05 ± 0.02	0.09	Nal_WBC	RE
EN00813	Adult	Female	23-Mar-2012	0.00	0.06	Nal_WBC	RE
EN00818	Adult	Male	9-Jul-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00818	Adult	Male	15-Aug-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00818	Adult	Male	20-Sep-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00819	Adult	Male	14-Jun-2010	0.00	0.06	Nal_WBC	RE
EN00819	Adult	Male	22-Mar-2011	0.11 ± 0.02	0.11	Nal_WBC	RE, Northern Is.
EN00819	Adult	Male	14-Oct-2011	0.00	0.11	Nal_WBC	RE, Northern Is.
EN00820	Adult	Female	4-Dec-2010	0.00	0.11	Nal_WBC	NR
EN00820	Adult	Female	27-Jun-2012	0.31 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00820	Adult	Female	19-Nov-2012	0.45 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00822	Adult	Male	14-Sep-2010	0.49 ± 0.04	0.19	Nal_WBC	RE
EN00822	Adult	Male	4-Oct-2011	0.37 ± 0.07	0.30	Nal_WBC	RE
EN00822	Adult	Male	26-Jan-2012	0.13 ± 0.01	0.13	Nal_WBC	RE
EN00822	Adult	Male	19-Jun-2012	0.25 ± 0.01	0.13	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00822	Adult	Male	2-Aug-2012	0.20 ± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00826	Adult	Male	10-Aug-2011	0.00	0.11	Nal_WBC	RE
EN00827	Adult	Male	26-Sep-2011	0.00	0.11	Nal_WBC	RE
EN00830	Adult	Female	15-Mar-2010	0.00	0.06	Nal_WBC	RE
EN00830	Adult	Female	15-Mar-2010	0.03 ± 0.02	0.09	Nal_WBC	RE
EN00830	Adult	Female	17-Mar-2010	0.00	0.06	Nal_WBC	RE
EN00830	Adult	Female	2-Mar-2011	0.44 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00830	Adult	Female	12-May-2011	0.28 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00830	Adult	Female	7-Jun-2011	0.00	0.12	Nal_WBC	RE, Northern Is.
EN00830	Adult	Female	27-Oct-2011	0.00	0.11	Nal_WBC	RE, Northern Is.
EN00830	Adult	Female	2-Feb-2012	0.00	0.06	Nal_WBC	RE
EN00830	Adult	Female	31-Jul-2012	0.00	0.11	Nal_WBC	RE
EN00830	Adult	Female	5-Dec-2012	0.00	0.06	Nal_WBC	RE
EN00831	Adult	Female	30-Dec-2010	0.00	0.10	Nal_WBC	RE
EN00831	Adult	Female	17-Aug-2012	0.00	0.10	Nal_WBC	RE
EN00834	Adult	Male	1-Oct-2011	0.00	0.10	Nal_WBC	RE
EN00834	Adult	Male	19-Jun-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00834	Adult	Male	14-Aug-2012	0.00	0.06	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00836	Adult	Female	23-Jul-2010	0.47	± 0.04	0.15	Nal_WBC	RE
EN00836	Adult	Female	18-Apr-2011	0.96	± 0.05	0.18	Nal_WBC	RE, Northern Is.
EN00836	Adult	Female	16-Feb-2012	0.52	± 0.02	0.13	Nal_WBC	RE
EN00836	Adult	Female	30-Mar-2012	0.28	± 0.02	0.14	Nal_WBC	RE
EN00836	Adult	Female	19-Jul-2012	0.28	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00838	Adult	Male	9-Apr-2010	0.04	± 0.02	0.09	Nal_WBC	RE
EN00838	Adult	Male	3-Mar-2011	0.13	± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN00838	Adult	Male	22-Mar-2011	0.13	± 0.03	0.11	Nal_WBC	RE, Northern Is.
EN00838	Adult	Male	28-May-2011	0.00		0.11	Nal_WBC	RE, Northern Is.
EN00838	Adult	Male	19-Mar-2012	0.14	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00838	Adult	Male	25-Jun-2012	0.09	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00839	Adult	Female	2-Sep-2010	0.11	± 0.02	0.11	Nal_WBC	RE
EN00839	Adult	Female	27-Oct-2011	0.09	± 0.03	0.16	Nal_WBC	RE
EN00839	Adult	Female	3-Aug-2012	0.08	± 0.01	0.12	Nal_WBC	RE
EN00840	Adult	Female	15-Sep-2010	0.00		0.07	Nal_WBC	RE
EN00842	Adult	Female	29-Mar-2012	0.05	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00842	Adult	Female	30-Oct-2012	0.00		0.06	Nal_WBC	RE, Northern Is.
EN00845	Adult	Female	14-Apr-2010	0.00		0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00845	Adult	Female	12-Aug-2010	0.13 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00845	Adult	Female	18-Jan-2012	0.00	0.06	Nal_WBC	RE
EN00845	Adult	Female	31-Jul-2012	0.00	0.06	Nal_WBC	RE
EN00845	Adult	Female	19-Sep-2012	0.00	0.11	Nal_WBC	RE
EN00848	Adult	Female	27-Jan-2010	0.00	0.06	Nal_WBC	RE
EN00848	Adult	Female	8-Apr-2010	0.00	0.06	Nal_WBC	RE
EN00850	Adult	Male	14-Apr-2010	0.11 ± 0.03	0.12	Nal_WBC	RE
EN00850	Adult	Male	23-Jun-2011	0.14 ± 0.03	0.13	Nal_WBC	RE
EN00851	Adult	Female	3-Jun-2011	0.00	0.06	Nal_WBC	RE
EN00851	Adult	Female	27-Oct-2011	0.00	0.11	Nal_WBC	RE
EN00852	Adult	Male	10-Jun-2011	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00852	Adult	Male	12-Apr-2012	0.17 ± 0.01	0.13	Nal_WBC	RE
EN00856	Adult	Male	20-Apr-2011	0.59 ± 0.05	0.20	Nal_WBC	RE, Northern Is.
EN00859	Adult	Male	6-Mar-2010	0.00	0.11	Nal_WBC	RE
EN00860	Adult	Male	1-Nov-2012	0.07 ± 0.01	0.13	Nal_WBC	RE
EN00861	Adult	Female	17-Jun-2010	0.00	0.06	Nal_WBC	RE
EN00861	Adult	Female	1-Jun-2011	0.08 ± 0.02	0.11	Nal_WBC	RE
EN00861	Adult	Female	25-Jan-2012	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00863	Adult	Female	1-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00863	Adult	Female	26-May-2011	0.00	0.06	Nal_WBC	RE
EN00863	Adult	Female	21-Sep-2011	0.00	0.11	Nal_WBC	RE
EN00863	Adult	Female	18-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00864	Adult	Female	21-Sep-2012	0.00	0.06	Nal_WBC	RE
EN00870	Adult	Male	8-Sep-2010	0.58 ± 0.05	0.21	Nal_WBC	RE
EN00870	Adult	Male	13-Sep-2012	0.06 ± 0.01	0.13	Nal_WBC	RE
EN00871	Adult	Female	26-May-2010	0.00	0.06	Nal_WBC	RE
EN00871	Adult	Female	26-Oct-2012	0.00	0.06	Nal_WBC	RE
EN00877	Adult	Female	26-May-2011	0.00	0.06	Nal_WBC	RE
EN00877	Adult	Female	11-Sep-2012	0.00	0.06	Nal_WBC	RE
EN00878	Adult	Female	27-Jan-2010	0.00	0.06	Nal_WBC	RE
EN00879	Adult	Female	16-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00880	Adult	Female	9-Sep-2010	0.12 ± 0.02	0.11	Nal_WBC	RE
EN00880	Adult	Female	17-Jul-2012	0.14 ± 0.01	0.13	Nal_WBC	RE
EN00883	Adult	Male	13-Apr-2010	0.05 ± 0.02	0.09	Nal_WBC	RE, Northern Is.
EN00883	Adult	Male	18-Jun-2010	0.35 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00883	Adult	Male	21-Sep-2011	0.00	0.11	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00884	Adult	Male	13-Apr-2010	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00884	Adult	Male	9-Nov-2010	0.05 ± 0.02	0.08	Nal_WBC	RE, Northern Is.
EN00884	Adult	Male	6-Jul-2011	0.50 ± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00884	Adult	Male	30-Apr-2012	0.20 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00884	Adult	Male	17-Oct-2012	0.16 ± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00885	Adult	Male	23-Mar-2010	0.14 ± 0.04	0.17	Nal_WBC	RE
EN00885	Adult	Male	9-Apr-2010	0.13 ± 0.03	0.13	Nal_WBC	RE
EN00885	Adult	Male	29-Mar-2011	0.90 ± 0.05	0.17	Nal_WBC	RE, Northern Is.
EN00885	Adult	Male	28-May-2011	1.04 ± 0.08	0.35	Nal_WBC	RE, Northern Is.
EN00885	Adult	Male	10-Feb-2012	0.25 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00885	Adult	Male	22-Mar-2012	0.24 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00885	Adult	Male	27-Jun-2012	0.54 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00885	Adult	Male	15-Oct-2012	0.67 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00885	Adult	Male	14-Nov-2012	0.80 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN00887	Adult	Male	4-Jan-2010	0.21 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00887	Adult	Male	13-Apr-2010	0.00	0.07	Nal_WBC	RE, Northern Is.
EN00887	Adult	Male	7-May-2010	0.23 ± 0.03	0.16	Nal_WBC	RE, Northern Is.
EN00887	Adult	Male	31-Mar-2011	0.61 ± 0.05	0.23	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00887	Adult	Male	27-May-2011	0.80	± 0.08	0.34	Nal_WBC	RE
EN00887	Adult	Male	19-Jun-2012	0.14	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00887	Adult	Male	16-Aug-2012	0.10	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00887	Adult	Male	11-Oct-2012	0.14	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00888	Adult	Female	19-Aug-2011	0.00		0.10	Nal_WBC	RE
EN00891	Adult	Female	16-Oct-2012	0.00		0.06	Nal_WBC	RE, Northern Is.
EN00893	Adult	Male	17-May-2010	0.05	± 0.02	0.10	Nal_WBC	RE
EN00893	Adult	Male	10-Nov-2010	0.00		0.07	Nal_WBC	RE, Northern Is.
EN00893	Adult	Male	4-Mar-2011	0.57	± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00893	Adult	Male	8-Apr-2011	0.82	± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00893	Adult	Male	18-Jun-2011	0.77	± 0.08	0.37	Nal_WBC	RE, Northern Is.
EN00893	Adult	Male	18-Oct-2011	0.39	± 0.08	0.35	Nal_WBC	RE, Northern Is.
EN00894	Adult	Female	2-Mar-2010	0.00		0.06	Nal_WBC	RE
EN00894	Adult	Female	12-Oct-2010	0.00		0.06	Nal_WBC	RE
EN00894	Adult	Female	30-Apr-2012	0.31	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00894	Adult	Female	16-Oct-2012	0.00		0.06	Nal_WBC	RE, Northern Is.
EN00895	Adult	Male	20-Jan-2010	0.04	± 0.02	0.09	Nal_WBC	RE
EN00895	Adult	Male	25-Feb-2010	0.08	± 0.02	0.10	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00895	Adult	Male	25-Mar-2010	0.05	± 0.02	0.11	Nal_WBC	RE
EN00896	Adult	Male	13-May-2010	0.14	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00900	Adult	Male	20-Jul-2012	0.23	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00903	Adult	Female	1-Aug-2011	0.00		0.10	Nal_WBC	RE
EN00904	Adult	Female	14-Apr-2010	0.18	± 0.04	0.17	Nal_WBC	RE
EN00905	Adult	Female	17-Sep-2010	0.00		0.06	Nal_WBC	RE
EN00905	Adult	Female	25-Oct-2012	0.08	± 0.01	0.12	Nal_WBC	RE
EN00906	Adult	Male	14-Apr-2010	0.00		0.06	Nal_WBC	RE
EN00908	Adult	Male	1-Oct-2011	0.00		0.11	Nal_WBC	RE
EN00908	Adult	Male	11-Jul-2012	0.00		0.10	Nal_WBC	RE
EN00911	Adult	Female	17-Sep-2010	0.00		0.06	Nal_WBC	RE
EN00913	Adult	Female	29-Oct-2012	0.06	± 0.01	0.13	Nal_WBC	RE
EN00914	Adult	Male	4-Oct-2010	0.00		0.06	Nal_WBC	RE
EN00917	Adult	Male	5-Feb-2010	0.00		0.07	Nal_WBC	RE, Northern Is.
EN00917	Adult	Male	14-Feb-2012	0.16	± 0.01	0.13	Nal_WBC	RE
EN00917	Adult	Male	12-Jul-2012	0.61	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00917	Adult	Male	13-Aug-2012	0.49	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00925	Adult	Female	17-Jun-2010	0.00		0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00925	Adult	Female	1-Nov-2012	0.00	0.05	Nal_WBC	RE
EN00927	Adult	Male	12-Apr-2010	0.00	0.06	Nal_WBC	RE
EN00927	Adult	Male	15-Jan-2011	0.63 ± 0.05	0.20	Nal_WBC	RE, Northern Is.
EN00927	Adult	Male	1-Mar-2011	1.15 ± 0.05	0.18	Nal_WBC	RE, Northern Is.
EN00927	Adult	Male	19-Apr-2011	0.83 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00927	Adult	Male	31-May-2011	0.61 ± 0.05	0.20	Nal_WBC	RE, Northern Is.
EN00927	Adult	Male	22-Feb-2012	0.39 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00927	Adult	Male	19-Mar-2012	0.25 ± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00927	Adult	Male	9-Jul-2012	0.14 ± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN00927	Adult	Male	25-Sep-2012	0.18 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00927	Adult	Male	18-Oct-2012	0.11 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00927	Adult	Male	10-Dec-2012	0.12 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00928	Teenager	Male	1-Mar-2011	0.58 ± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN00928	Teenager	Male	25-Mar-2011	0.71 ± 0.05	0.19	Nal_WBC	RE
EN00928	Teenager	Male	11-Apr-2011	1.14 ± 0.05	0.18	Nal_WBC	RE
EN00928	Teenager	Male	12-May-2011	1.09 ± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN00928	Teenager	Male	23-Jan-2012	0.91 ± 0.03	0.15	Nal_WBC	RE
EN00928	Teenager	Male	10-Feb-2012	0.79 ± 0.03	0.15	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00928	Teenager	Male	20-Mar-2012	0.63	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00928	Teenager	Male	10-May-2012	1.90	± 0.06	0.16	Nal_WBC	RE, Northern Is.
EN00928	Adult	Male	25-Sep-2012	1.44	± 0.10	0.38	Nal_WBC	RE, Northern Is.
EN00929	Adult	Male	12-Apr-2010	0.15	± 0.04	0.19	Nal_WBC	RE
EN00930	Adult	Male	1-Nov-2010	0.08	± 0.03	0.22	Nal_WBC	RE, Northern Is.
EN00930	Adult	Male	18-Apr-2011	0.40	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00930	Adult	Male	30-Jun-2011	0.59	± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00930	Adult	Male	17-Jan-2012	0.24	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00930	Adult	Male	25-Sep-2012	0.16	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00931	Adult	Female	6-Aug-2010	0.09	± 0.02	0.11	Nal_WBC	RE
EN00931	Adult	Female	3-Aug-2012	0.11	± 0.01	0.13	Nal_WBC	RE
EN00934	Adult	Female	12-Mar-2010	0.00		0.06	Nal_WBC	RE
EN00934	Adult	Female	20-Jan-2012	0.00		0.06	Nal_WBC	RE
EN00938	Adult	Male	22-Mar-2010	0.26	± 0.04	0.18	Nal_WBC	RE
EN00938	Adult	Male	9-Apr-2010	0.34	± 0.04	0.16	Nal_WBC	RE
EN00938	Adult	Male	30-Jul-2010	0.65	± 0.05	0.20	Nal_WBC	RE, Northern Is.
EN00938	Adult	Male	21-Mar-2011	0.61	± 0.04	0.19	Nal_WBC	RE, Northern Is.
EN00938	Adult	Male	19-May-2011	0.61	± 0.04	0.16	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00938	Adult	Male	30-Aug-2011	1.09 ± 0.09	0.36	Nal_WBC	RE, Northern Is.
EN00938	Adult	Male	27-Sep-2011	0.85 ± 0.08	0.34	Nal_WBC	RE, Northern Is.
EN00938	Adult	Male	11-Jan-2012	0.32 ± 0.02	0.14	Nal_WBC	RE
EN00938	Adult	Male	6-Feb-2012	0.25 ± 0.01	0.14	Nal_WBC	RE
EN00938	Adult	Male	16-Apr-2012	0.22 ± 0.01	0.14	Nal_WBC	RE
EN00938	Adult	Male	30-Jul-2012	0.33 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN00938	Adult	Male	23-Oct-2012	0.26 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00938	Adult	Male	29-Nov-2012	0.19 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN00939	Adult	Female	23-Mar-2010	0.00	0.06	Nal_WBC	RE
EN00939	Adult	Female	15-Jun-2011	0.06 ± 0.02	0.11	Nal_WBC	RE
EN00939	Adult	Female	3-Aug-2012	0.00	0.06	Nal_WBC	RE
EN00941	Adult	Male	5-Feb-2010	0.00	0.07	Nal_WBC	RE, Northern Is.
EN00941	Adult	Male	3-Feb-2012	0.16 ± 0.01	0.13	Nal_WBC	RE
EN00941	Adult	Male	27-Jun-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN00942	Adult	Female	3-Feb-2012	0.05 ± 0.01	0.13	Nal_WBC	RE
EN00943	Teenager	Male	8-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00943	Teenager	Male	15-Apr-2011	0.06 ± 0.02	0.10	Nal_WBC	RE, Northern Is.
EN00943	Adult	Male	17-Jul-2012	0.78 ± 0.03	0.14	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN00945	Teenager	Female	15-Mar-2010	0.00	0.06	Nal_WBC	RE
EN00945	Teenager	Female	17-Mar-2010	0.00	0.06	Nal_WBC	RE
EN00945	Teenager	Female	14-Jun-2011	0.05 ± 0.02	0.08	Nal_WBC	RE
EN00945	Adult	Female	26-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00946	Teenager	Female	22-Apr-2011	0.00	0.06	Nal_WBC	RE
EN00946	Teenager	Female	26-Apr-2012	0.00	0.06	Nal_WBC	RE
EN00949	Teenager	Female	1-Aug-2012	0.00	0.11	Nal_WBC	RE
EN00964	Pre-Teenager	Male	21-Jun-2010	0.20 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00967	Teenager	Male	23-Jan-2012	0.47 ± 0.02	0.14	Nal_WBC	RE
EN00967	Teenager	Male	19-Jun-2012	0.30 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN00979	Adult	Male	1-Sep-2011	0.00	0.11	Nal_WBC	NR
EN00981	Adult	Female	6-Sep-2010	0.00	0.06	Nal_WBC	RE
EN00981	Adult	Female	6-Apr-2011	0.00	0.06	Nal_WBC	RE
EN00981	Adult	Female	4-Apr-2012	0.00	0.05	Nal_WBC	RE
EN00990	Adult	Female	28-Jun-2010	0.08 ± 0.02	0.10	Nal_WBC	RE
EN00990	Adult	Female	25-May-2011	0.00	0.06	Nal_WBC	RE
EN00990	Adult	Female	20-Jan-2012	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN00991	Adult	Male	14-Jan-2010	0.04	± 0.02	0.08	Nal_WBC	RE
EN00991	Adult	Male	11-May-2010	0.14	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN00991	Adult	Male	9-Apr-2011	0.61	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00991	Adult	Male	11-Apr-2011	0.72	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN00991	Adult	Male	28-May-2011	0.65	± 0.08	0.34	Nal_WBC	RE, Northern Is.
EN00991	Adult	Male	21-Sep-2011	0.00		0.12	Nal_WBC	RE, Northern Is.
EN00991	Adult	Male	14-Oct-2011	0.00		0.12	Nal_WBC	RE, Northern Is.
EN00993	Adult	Male	17-May-2010	0.23	± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN00993	Adult	Male	28-Jun-2010	0.59	± 0.05	0.23	Nal_WBC	RE, Northern Is.
EN00993	Adult	Male	21-Mar-2011	0.50	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN00993	Adult	Male	11-Apr-2011	0.60	± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN00994	Adult	Female	17-Jun-2010	0.12	± 0.03	0.13	Nal_WBC	RE
EN00994	Adult	Female	16-Jun-2011	0.13	± 0.02	0.10	Nal_WBC	RE
EN00994	Adult	Female	16-Apr-2012	0.00		0.06	Nal_WBC	RE
EN00995	Adult	Female	17-Jun-2010	0.00		0.06	Nal_WBC	RE
EN00996	Teenager	Female	30-Oct-2012	0.10	± 0.01	0.13	Nal_WBC	RE
EN01000	Adult	Female	29-Oct-2012	0.05	± 0.01	0.13	Nal_WBC	RE
EN01004	Adult	Female	1-Sep-2010	0.07	± 0.02	0.09	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN01008	Adult	Female	6-Jun-2011	0.00	0.06	Nal_WBC	RE
EN01020	Teenager	Male	8-Sep-2010	0.32 ± 0.03	0.14	Nal_WBC	RE
EN01020	Teenager	Male	25-Mar-2011	0.23 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN01020	Teenager	Male	23-Jan-2012	0.23 ± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN01020	Teenager	Male	1-Oct-2012	0.31 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN01025	Teenager	Male	2-May-2011	0.11 ± 0.03	0.11	Nal_WBC	RE
EN01026	Teenager	Male	2-May-2011	0.05 ± 0.02	0.08	Nal_WBC	RE
EN01034	Teenager	Male	26-Jun-2012	0.00	0.11	Nal_WBC	RE
EN01036	Adult	Female	9-Aug-2010	0.08 ± 0.02	0.11	Nal_WBC	RE
EN01036	Adult	Female	29-Jun-2012	0.00	0.06	Nal_WBC	RE
EN01036	Adult	Female	9-Oct-2012	0.46 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN01036	Adult	Female	20-Nov-2012	0.35 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN01044	Teenager	Female	31-Jul-2012	0.00	0.11	Nal_WBC	RE
EN01047	Pre-Teenager	Female	14-Jun-2011	0.00	0.06	Nal_WBC	RE
EN01049	Pre-Teenager	Male	14-Aug-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN01050	Pre-Teenager	Male	4-Jan-2010	0.21 ± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN01050	Pre-Teenager	Male	13-Jan-2010	0.10 ± 0.02	0.10	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN01050	Pre-Teenager	Male	10-May-2010	0.05	± 0.02	0.11	Nal_WBC	RE, Northern Is.
EN01051	Pre-Teenager	Male	13-Jan-2010	0.17	± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN01063	Teenager	Male	15-Sep-2010	0.28	± 0.04	0.18	Nal_WBC	RE
EN01063	Adult	Male	1-Mar-2011	1.79	± 0.07	0.24	Nal_WBC	RE, Northern Is.
EN01063	Adult	Male	11-Apr-2011	1.17	± 0.05	0.18	Nal_WBC	RE, Northern Is.
EN01063	Adult	Male	6-Jun-2011	1.17	± 0.06	0.22	Nal_WBC	RE, Northern Is.
EN01063	Adult	Male	26-Jul-2011	1.61	± 0.10	0.36	Nal_WBC	RE, Northern Is.
EN01063	Adult	Male	13-Sep-2012	0.00		0.05	Nal_WBC	RE
EN01064	Adult	Female	12-Oct-2010	0.04	± 0.02	0.09	Nal_WBC	RE
EN01064	Adult	Female	4-Oct-2012	0.00		0.06	Nal_WBC	RE
EN01066	Adult	Male	12-Mar-2010	0.15	± 0.04	0.16	Nal_WBC	RE
EN01066	Adult	Male	10-Apr-2010	0.06	± 0.02	0.10	Nal_WBC	RE
EN01066	Adult	Male	11-Aug-2010	0.46	± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN01067	Adult	Female	8-Sep-2010	0.07	± 0.02	0.07	Nal_WBC	RE
EN01067	Adult	Female	27-Mar-2012	0.09	± 0.01	0.13	Nal_WBC	RE
EN01069	Adult	Male	14-Jan-2010	0.05	± 0.02	0.09	Nal_WBC	RE, Northern Is.
EN01070	Adult	Male	29-Jan-2010	0.00		0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN01071	Adult	Male	29-Jan-2010	0.00	0.06	Nal_WBC	RE
EN01071	Adult	Male	9-Jun-2010	0.05 ± 0.02	0.08	Nal_WBC	RE
EN01072	Adult	Male	29-Jan-2010	0.00	0.06	Nal_WBC	RE
EN01075	Adult	Male	5-Mar-2010	0.00	0.06	Nal_WBC	RE
EN01075	Adult	Male	17-Mar-2010	0.00	0.06	Nal_WBC	RE
EN01076	Adult	Female	15-Mar-2010	0.00	0.06	Nal_WBC	RE
EN01076	Adult	Female	17-Mar-2010	0.03 ± 0.02	0.08	Nal_WBC	RE
EN01076	Adult	Female	30-Jul-2010	0.41 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN01076	Adult	Female	31-Jan-2012	0.00	0.06	Nal_WBC	RE
EN01077	Adult	Male	19-Mar-2010	0.37 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN01077	Adult	Male	23-Jun-2011	0.08 ± 0.02	0.09	Nal_WBC	RE, Northern Is.
EN01077	Adult	Male	15-Jul-2011	0.55 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN01077	Adult	Male	9-Feb-2012	0.22 ± 0.01	0.13	Nal_WBC	RE
EN01077	Adult	Male	24-Apr-2012	0.08 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN01077	Adult	Male	15-Oct-2012	0.10 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN01078	Adult	Female	19-Mar-2010	0.00	0.06	Nal_WBC	RE
EN01079	Adult	Male	22-Mar-2010	0.03 ± 0.02	0.08	Nal_WBC	RE
EN01079	Adult	Male	12-Aug-2010	0.06 ± 0.02	0.09	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN01079	Adult	Male	10-Nov-2010	0.41	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN01079	Adult	Male	1-Mar-2011	0.59	± 0.04	0.19	Nal_WBC	RE, Northern Is.
EN01079	Adult	Male	8-Apr-2011	0.88	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN01079	Adult	Male	2-May-2011	0.75	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN01079	Adult	Male	18-Oct-2012	0.25	± 0.02	0.13	Nal_WBC	RE
EN01080	Adult	Male	12-Apr-2010	0.50	± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN01080	Adult	Male	3-Aug-2010	0.68	± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN01080	Adult	Male	9-Sep-2010	0.44	± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN01080	Adult	Male	17-Jan-2011	0.40	± 0.05	0.23	Nal_WBC	RE, Northern Is.
EN01080	Adult	Male	16-Jun-2011	0.44	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN01080	Adult	Male	11-Jul-2011	0.79	± 0.05	0.20	Nal_WBC	RE, Northern Is.
EN01080	Adult	Male	23-Mar-2012	0.21	± 0.01	0.14	Nal_WBC	RE
EN01080	Adult	Male	9-May-2012	0.89	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN01080	Adult	Male	22-Jun-2012	0.66	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN01080	Adult	Male	17-Aug-2012	0.87	± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN01080	Adult	Male	26-Sep-2012	0.50	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN01080	Adult	Male	26-Sep-2012	0.57	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN01081	Adult	Female	13-Apr-2010	0.08	± 0.03	0.15	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN01081	Adult	Female	6-Jun-2011	0.04 ± 0.02	0.08	Nal_WBC	RE
EN01081	Adult	Female	26-Apr-2012	0.16 ± 0.01	0.13	Nal_WBC	RE
EN01081	Adult	Female	8-Aug-2012	0.00	0.06	Nal_WBC	RE
EN01082	Adult	Male	7-May-2010	0.28 ± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN01083	Teenager	Male	10-May-2010	0.10 ± 0.02	0.10	Nal_WBC	RE, Northern Is.
EN01083	Teenager	Male	2-May-2011	0.06 ± 0.02	0.10	Nal_WBC	RE
EN01083	Teenager	Male	2-Jul-2012	0.00	0.06	Nal_WBC	RE
EN01083	Teenager	Male	1-Oct-2012	0.08 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN01084	Adult	Female	25-May-2010	0.03 ± 0.02	0.08	Nal_WBC	RE
EN01085	Adult	Female	8-Jun-2010	0.00	0.06	Nal_WBC	RE
EN01086	Adult	Male	8-Jun-2010	0.06 ± 0.02	0.10	Nal_WBC	RE, Northern Is.
EN01086	Adult	Male	8-Nov-2010	0.04 ± 0.02	0.08	Nal_WBC	RE, Northern Is.
EN01087	Adult	Female	14-Jun-2010	0.07 ± 0.02	0.11	Nal_WBC	RE
EN01088	Adult	Male	21-Oct-2010	0.00	0.06	Nal_WBC	RE
EN01088	Adult	Male	24-May-2012	0.00	0.06	Nal_WBC	RE
EN01091	Adult	Female	10-Aug-2010	0.00	0.06	Nal_WBC	RE
EN01092	Adult	Female	6-Sep-2010	0.05 ± 0.02	0.09	Nal_WBC	RE
EN01092	Adult	Female	22-Feb-2012	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN01092	Adult	Female	19-Sep-2012	0.00	0.10	Nal_WBC	RE
EN01093	Adult	Female	9-Sep-2010	0.00	0.06	Nal_WBC	RE
EN01093	Adult	Female	2-Jun-2011	0.00	0.06	Nal_WBC	RE
EN01093	Adult	Female	27-Apr-2012	0.00	0.06	Nal_WBC	RE
EN01094	Adult	Male	13-Sep-2010	0.00	0.06	Nal_WBC	RE
EN01094	Adult	Male	18-Apr-2011	0.31 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN01095	Adult	Female	1-Oct-2010	0.07 ± 0.02	0.11	Nal_WBC	RE
EN01095	Adult	Female	29-Jun-2011	0.10 ± 0.02	0.10	Nal_WBC	RE
EN01095	Adult	Female	26-Oct-2012	0.00	0.06	Nal_WBC	RE
EN01096	Teenager	Female	1-Oct-2010	0.15 ± 0.03	0.13	Nal_WBC	RE
EN01096	Teenager	Female	21-Apr-2011	0.12 ± 0.03	0.12	Nal_WBC	RE
EN01096	Teenager	Female	6-Jul-2011	0.07 ± 0.02	0.10	Nal_WBC	RE
EN01097	Adult	Female	6-Oct-2010	0.16 ± 0.04	0.17	Nal_WBC	RE
EN01097	Adult	Female	29-Oct-2012	0.17 ± 0.01	0.13	Nal_WBC	RE
EN01098	Adult	Female	7-Oct-2010	0.00	0.06	Nal_WBC	RE
EN01099	Adult	Female	11-Oct-2010	0.00	0.06	Nal_WBC	RE
EN01100	Adult	Male	29-Oct-2010	0.00	0.06	Nal_WBC	RE, Northern Is.
EN01100	Adult	Male	3-Mar-2011	0.67 ± 0.05	0.20	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN01100	Adult	Male	21-Mar-2011	0.78 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN01100	Adult	Male	14-Apr-2011	0.82 ± 0.05	0.19	Nal_WBC	RE, Northern Is.
EN01101	Adult	Female	2-Nov-2010	0.00	0.06	Nal_WBC	RE
EN01102	Adult	Female	2-Nov-2010	0.00	0.06	Nal_WBC	RE
EN01103	Adult	Male	2-Nov-2010	0.00	0.06	Nal_WBC	RE
EN01104	Adult	Female	2-Nov-2010	0.00	0.06	Nal_WBC	RE
EN01105	Adult	Male	2-Nov-2010	0.00	0.06	Nal_WBC	RE
EN01106	Adult	Male	2-Nov-2010	0.00	0.06	Nal_WBC	RE
EN01107	Adult	Female	11-Nov-2010	0.00	0.06	Nal_WBC	RE
EN01108	Adult	Male	16-Dec-2010	0.00	0.06	Nal_WBC	RE
EN01109	Adult	Female	1-Mar-2011	0.90 ± 0.05	0.22	Nal_WBC	RE, Northern Is.
EN01110	Adult	Female	1-Mar-2011	0.56 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN01111	Adult	Female	3-Mar-2011	0.19 ± 0.03	0.16	Nal_WBC	RE, Northern Is.
EN01112	Adult	Male	18-Mar-2011	0.43 ± 0.03	0.13	Nal_WBC	RE, Northern Is.
EN01112	Adult	Male	14-Apr-2011	0.53 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
EN01112	Adult	Male	8-Jun-2012	0.00	0.14	Nal_WBC	RE
EN01112	Adult	Male	15-Aug-2012	0.00	0.13	Nal_WBC	RE
EN01113	Adult	Male	22-Mar-2011	0.43 ± 0.04	0.19	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN01113	Adult	Male	10-May-2012	3.81	± 0.11	0.18	Nal_WBC	RE, Northern Is.
EN01113	Adult	Male	10-Jul-2012	2.40	± 0.12	0.38	Nal_WBC	RE, Northern Is.
EN01114	Adult	Male	24-Mar-2011	0.00		0.06	Nal_WBC	RE
EN01114	Adult	Male	18-May-2011	0.06	± 0.03	0.12	Nal_WBC	RE, Northern Is.
EN01114	Adult	Male	11-Jan-2012	0.11	± 0.01	0.13	Nal_WBC	RE
EN01114	Adult	Male	6-Feb-2012	0.06	± 0.01	0.13	Nal_WBC	RE
EN01114	Adult	Male	18-Apr-2012	0.12	± 0.01	0.13	Nal_WBC	RE
EN01114	Adult	Male	30-Jul-2012	0.16	± 0.01	0.14	Nal_WBC	RE
EN01114	Adult	Male	29-Nov-2012	0.10	± 0.01	0.12	Nal_WBC	RE
EN01115	Teenager	Female	4-Apr-2011	0.00		0.06	Nal_WBC	RE
EN01116	Teenager	Male	5-Apr-2011	0.00		0.06	Nal_WBC	RE
EN01116	Teenager	Male	12-Jul-2011	0.37	± 0.04	0.16	Nal_WBC	RE, Northern Is.
EN01116	Adult	Male	6-Feb-2012	0.32	± 0.02	0.13	Nal_WBC	RE
EN01116	Adult	Male	24-Feb-2012	2.10	± 0.06	0.16	Nal_WBC	RE
EN01116	Adult	Male	22-Nov-2012	1.03	± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN01117	Adult	Male	8-Apr-2011	0.97	± 0.05	0.18	Nal_WBC	RE, Northern Is.
EN01118	Adult	Female	14-Apr-2011	0.00		0.06	Nal_WBC	RE
EN01118	Adult	Female	23-Jan-2012	0.00		0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN01118	Adult	Female	15-Aug-2012	0.00	0.05	Nal_WBC	RE
EN01119	Adult	Male	14-Apr-2011	0.00	0.06	Nal_WBC	RE
EN01120	Adult	Female	15-Apr-2011	0.07 ± 0.02	0.10	Nal_WBC	RE
EN01121	Adult	Male	20-Apr-2011	0.28 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
EN01122	Adult	Male	21-Apr-2011	0.03 ± 0.02	0.07	Nal_WBC	RE, Northern Is.
EN01123	Teenager	Female	27-May-2011	0.13 ± 0.02	0.10	Nal_WBC	RE
EN01123	Teenager	Female	10-May-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN01123	Teenager	Female	1-Nov-2012	0.10 ± 0.01	0.12	Nal_WBC	RE, Northern Is.
EN01124	Adult	Male	20-Jun-2011	0.08 ± 0.02	0.11	Nal_WBC	RE, Rng
EN01124	Adult	Male	11-Jul-2011	0.48 ± 0.04	0.15	Nal_WBC	RE
EN01125	Adult	Male	8-Jul-2011	0.49 ± 0.04	0.17	Nal_WBC	RE, Northern Is.
EN01125	Adult	Male	20-Mar-2012	0.62 ± 0.02	0.14	Nal_WBC	RE
EN01125	Adult	Male	21-Jun-2012	1.92 ± 0.06	0.16	Nal_WBC	RE, Northern Is.
EN01125	Adult	Male	20-Sep-2012	1.30 ± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN01125	Adult	Male	15-Oct-2012	1.20 ± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN01125	Adult	Male	14-Nov-2012	1.12 ± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN01126	Adult	Female	16-Jan-2012	0.00	0.06	Nal_WBC	RE
EN01127	Teenager	Female	18-Jan-2012	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
EN01128	Teenager	Female	23-Jan-2012	0.00	0.06	Nal_WBC	RE
EN01129	Adult	Female	24-Jan-2012	0.00	0.06	Nal_WBC	RE
EN01130	Adult	Male	25-Jan-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN01130	Adult	Male	4-Jul-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN01130	Adult	Male	1-Oct-2012	0.00	0.06	Nal_WBC	RE, Northern Is.
EN01132	Adult	Male	27-Jan-2012	0.29 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN01132	Adult	Male	7-Feb-2012	0.46 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN01132	Adult	Male	22-Feb-2012	0.51 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN01132	Adult	Male	12-Apr-2012	0.49 ± 0.07	0.32	Nal_WBC	RE, Northern Is.
EN01133	Adult	Male	30-Jan-2012	0.52 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN01133	Adult	Male	15-Feb-2012	0.42 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN01133	Adult	Male	20-Mar-2012	0.45 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN01133	Adult	Male	24-Apr-2012	0.25 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN01133	Adult	Male	10-Jul-2012	0.16 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN01133	Adult	Male	10-Oct-2012	0.65 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN01133	Adult	Male	2-Nov-2012	0.81 ± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN01134	Pre-Teenager	Female	1-Feb-2012	0.00	0.06	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN01135	Teenager	Female	2-Feb-2012	0.33	± 0.02	0.13	Nal_WBC	RE
EN01136	Adult	Male	8-Feb-2012	0.11	± 0.01	0.13	Nal_WBC	RE
EN01137	Adult	Male	9-Feb-2012	0.18	± 0.01	0.14	Nal_WBC	RE, Northern Is.
EN01138	Adult	Male	9-Feb-2012	0.19	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN01139	Adult	Male	10-Feb-2012	0.18	± 0.01	0.13	Nal_WBC	RE
EN01140	Adult	Male	15-Feb-2012	0.00		0.06	Nal_WBC	RE
EN01141	Adult	Female	16-Feb-2012	0.00		0.06	Nal_WBC	RE
EN01141	Adult	Female	4-May-2012	0.05	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN01142	Adult	Male	20-Feb-2012	0.92	± 0.03	0.15	Nal_WBC	RE
EN01142	Adult	Male	20-Mar-2012	1.11	± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN01142	Adult	Male	2-May-2012	1.58	± 0.05	0.15	Nal_WBC	RE, Northern Is.
EN01142	Adult	Male	20-Jun-2012	1.15	± 0.04	0.14	Nal_WBC	RE, Northern Is.
EN01142	Adult	Male	18-Jul-2012	1.32	± 0.04	0.15	Nal_WBC	RE, Northern Is.
EN01142	Adult	Male	16-Aug-2012	1.07	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN01142	Adult	Male	24-Sep-2012	0.71	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN01142	Adult	Male	18-Oct-2012	0.61	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN01142	Adult	Male	6-Dec-2012	0.54	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN01143	Adult	Male	21-Feb-2012	0.08	± 0.01	0.13	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
EN01144	Adult	Male	21-Feb-2012	0.34	± 0.02	0.14	Nal_WBC	RE
EN01145	Adult	Male	23-Feb-2012	0.11	± 0.01	0.14	Nal_WBC	RE
EN01145	Adult	Male	27-Jun-2012	0.00		0.11	Nal_WBC	RE
EN01146	Teenager	Male	26-Mar-2012	0.00		0.06	Nal_WBC	RE
EN01147	Adult	Female	11-Apr-2012	0.00		0.05	Nal_WBC	RE
EN01148	Adult	Male	18-Apr-2012	0.00		0.06	Nal_WBC	RE
EN01148	Adult	Male	4-Jul-2012	0.00		0.06	Nal_WBC	RE, Northern Is.
EN01150	Pre-Teenager	Male	9-May-2012	0.61	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN01150	Pre-Teenager	Male	8-Aug-2012	0.15	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN01151	Adult	Male	20-Jun-2012	0.00		0.06	Nal_WBC	RE, Northern Is.
EN01152	Adult	Female	27-Jun-2012	0.00		0.06	Nal_WBC	RE
EN01153	Adult	Male	9-Jul-2012	0.00		0.06	Nal_WBC	RE, Northern Is.
EN01154	Adult	Male	12-Jul-2012	0.44	± 0.02	0.14	Nal_WBC	RE, Northern Is.
EN01154	Adult	Male	17-Oct-2012	0.23	± 0.01	0.13	Nal_WBC	RE, Northern Is.
EN01155	Pre-Teenager	Male	18-Jul-2012	0.39	± 0.02	0.13	Nal_WBC	RE, Northern Is.
EN01156	Pre-Teenager	Male	8-Aug-2012	0.96	± 0.03	0.14	Nal_WBC	RE, Northern Is.
EN01157	Adult	Male	1-Oct-2012	0.00		0.06	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
MI001090	Adult	Female	5-Feb-2010	0.26	± 0.04	0.17	Nal_WBC	RE, Northern Is.
MI001090	Adult	Female	16-Apr-2010	0.58	± 0.05	0.21	Nal_WBC	RE, Northern Is.
MI001090	Adult	Female	3-Aug-2010	0.19	± 0.03	0.13	Nal_WBC	RE, Northern Is.
MI001090	Adult	Female	1-Nov-2012	0.00		0.06	Nal_WBC	RE
MI00226	Adult	Female	1-Jun-2011	0.16	± 0.03	0.12	Nal_WBC	RE, Northern Is.
MI00226	Adult	Female	31-Aug-2011	0.00		0.11	Nal_WBC	RE, Northern Is.
MI00226	Adult	Female	29-Mar-2012	0.14	± 0.01	0.13	Nal_WBC	RE
MI00234	Adult	Male	25-Feb-2010	0.39	± 0.04	0.16	Nal_WBC	RE
MI00234	Adult	Male	25-Mar-2010	0.32	± 0.03	0.13	Nal_WBC	RE
MI00234	Adult	Male	20-May-2010	0.43	± 0.04	0.16	Nal_WBC	RE
MI00234	Adult	Male	23-Jun-2010	0.56	± 0.04	0.18	Nal_WBC	RE
MI00234	Adult	Male	20-Sep-2010	0.51	± 0.04	0.17	Nal_WBC	RE
MI00234	Adult	Male	30-Oct-2010	0.41	± 0.07	0.30	Nal_WBC	RE
MI00234	Adult	Male	3-Sep-2011	0.00		0.11	Nal_WBC	RE
MI00237	Adult	Male	8-Apr-2010	0.13	± 0.02	0.11	Nal_WBC	RE
MI00237	Adult	Male	17-Mar-2011	0.49	± 0.04	0.17	Nal_WBC	RE, Northern Is.
MI00237	Adult	Male	9-Apr-2011	0.90	± 0.05	0.20	Nal_WBC	RE, Northern Is.
MI00237	Adult	Male	11-Jul-2011	1.00	± 0.05	0.16	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)			Method Code	Notes
				Value		MDA		
MI00237	Adult	Male	18-Jan-2012	0.42	± 0.02	0.13	Nal_WBC	RE, Northern Is.
MI00237	Adult	Male	28-Jun-2012	0.37	± 0.02	0.14	Nal_WBC	RE, Northern Is.
MI00237	Adult	Male	19-Nov-2012	0.46	± 0.02	0.14	Nal_WBC	RE, Northern Is.
MI00334	Adult	Male	29-Jan-2010	0.00		0.06	Nal_WBC	RE
MI00334	Adult	Male	24-Apr-2012	0.06	± 0.01	0.13	Nal_WBC	RE
MI00334	Adult	Male	26-Jul-2012	0.06	± 0.01	0.14	Nal_WBC	RE
MI00800	Adult	Female	2-Dec-2010	0.00		0.10	Nal_WBC	NR
MI00865	Adult	Male	16-Feb-2010	0.05	± 0.02	0.08	Nal_WBC	RE
MI00865	Adult	Male	9-Apr-2010	0.05	± 0.02	0.10	Nal_WBC	RE
MI00865	Adult	Male	10-May-2010	0.24	± 0.04	0.17	Nal_WBC	RE
MI00865	Adult	Male	20-Oct-2010	0.17	± 0.03	0.12	Nal_WBC	RE
MI00865	Adult	Male	28-Mar-2011	0.73	± 0.05	0.21	Nal_WBC	RE, Northern Is.
MI00865	Adult	Male	14-Apr-2011	1.03	± 0.05	0.17	Nal_WBC	RE, Northern Is.
MI00865	Adult	Male	2-Apr-2012	0.18	± 0.01	0.13	Nal_WBC	RE
MI00865	Adult	Male	11-May-2012	1.21	± 0.04	0.15	Nal_WBC	RE
MI00865	Adult	Male	12-Jul-2012	0.95	± 0.08	0.35	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
MI00865	Adult	Male	15-Oct-2012	0.48 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
MI00901	Adult	Male	19-Feb-2010	0.00	0.11	Nal_WBC	RE
MI01022	Adult	Male	31-Mar-2011	0.39 ± 0.04	0.18	Nal_WBC	RE, Northern Is.
MI01022	Adult	Male	13-Jul-2012	0.00	0.11	Nal_WBC	RE, Northern Is.
MI01027	Teenager	Male	15-Sep-2010	0.09 ± 0.03	0.16	Nal_WBC	NR
MI01050	Adult	Male	14-Aug-2010	0.00	0.11	Nal_WBC	RE
MI01113	Adult	Male	27-Apr-2011	0.07 ± 0.03	0.15	Nal_WBC	NR, Rng
MI01130	Adult	Female	2-Nov-2010	0.00	0.10	Nal_WBC	RE
MI01130	Adult	Female	16-Nov-2010	0.00	0.10	Nal_WBC	RE
MI01130	Adult	Female	25-Feb-2011	0.00	0.11	Nal_WBC	NR
MI01417	Adult	Male	28-May-2011	0.62 ± 0.07	0.32	Nal_WBC	RE
MI01417	Adult	Male	30-Jan-2012	0.31 ± 0.02	0.13	Nal_WBC	RE, Northern Is.
MI01417	Adult	Male	9-May-2012	2.10 ± 0.06	0.17	Nal_WBC	RE, Northern Is.
MI01417	Adult	Male	21-Jun-2012	1.55 ± 0.05	0.16	Nal_WBC	RE, Northern Is.
MI01417	Adult	Male	18-Jul-2012	1.41 ± 0.04	0.15	Nal_WBC	RE, Northern Is.
MI01457	Adult	Female	27-Jan-2012	0.21 ± 0.01	0.13	Nal_WBC	RE, Northern Is.

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
MI01457	Adult	Female	7-Feb-2012	0.23 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
MI01521	Adult	Male	13-Jan-2011	0.00	0.06	Nal_WBC	RE
MI01660	Teenager	Male	27-Feb-2010	0.00	0.10	Nal_WBC	NR
MI01660	Adult	Male	13-Oct-2011	0.00	0.11	Nal_WBC	NR
MI01660	Adult	Male	25-Jun-2012	0.00	0.11	Nal_WBC	NR
MI01660	Adult	Male	12-Oct-2012	0.00	0.11	Nal_WBC	NR
MI01660	Adult	Male	13-Dec-2012	0.00	0.11	Nal_WBC	NR
MI01704	Adult	Male	18-Mar-2010	0.00	0.10	Nal_WBC	RE, Bik
MI01766	Pre-Teenager	Female	26-Jun-2010	0.00	0.10	Nal_WBC	NR
MI01882	Teenager	Female	28-Aug-2010	0.09 ± 0.05	0.24	Nal_WBC	NR
MI01883	Teenager	Female	28-Aug-2010	0.00	0.11	Nal_WBC	NR
MI01884	Adult	Female	28-Aug-2010	0.00	0.11	Nal_WBC	NR
MI01890	Adult	Male	1-Sep-2010	0.26 ± 0.04	0.18	Nal_WBC	RE
MI01891	Adult	Male	1-Sep-2010	0.00	0.11	Nal_WBC	RE
MI01892	Adult	Male	1-Sep-2010	0.00	0.11	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
MI01894	Adult	Male	2-Sep-2010	0.00	0.11	Nal_WBC	RE
MI01895	Adult	Male	2-Sep-2010	0.00	0.11	Nal_WBC	RE
MI01896	Adult	Male	2-Sep-2010	0.00	0.11	Nal_WBC	RE
MI02040	Adult	Female	30-Dec-2010	0.00	0.10	Nal_WBC	RE
MI02041	Adult	Male	3-Jan-2011	0.00	0.11	Nal_WBC	RE
MI02043	Adult	Female	3-Jan-2011	0.00	0.10	Nal_WBC	NR
MI02147	Adult	Male	18-Jun-2011	0.00	0.11	Nal_WBC	NR
MI02168	Adult	Male	2-Jul-2011	0.00	0.11	Nal_WBC	NR
MI02168	Adult	Male	6-Sep-2011	0.00	0.10	Nal_WBC	NR
MI02168	Adult	Male	18-Jul-2012	0.65 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
MI02168	Adult	Male	16-Oct-2012	1.02 ± 0.03	0.15	Nal_WBC	RE, Northern Is.
MI02168	Adult	Male	13-Nov-2012	0.63 ± 0.02	0.15	Nal_WBC	RE, Northern Is.
MI02169	Adult	Male	2-Jul-2011	0.00	0.12	Nal_WBC	RE
MI02184	Adult	Male	13-Jul-2011	0.00	0.11	Nal_WBC	NR
MI02209	Adult	Male	5-Aug-2011	0.00	0.10	Nal_WBC	NR
MI02210	Adult	Male	5-Aug-2011	0.00	0.11	Nal_WBC	NR

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
MI02214	Adult	Male	8-Aug-2011	0.00	0.10	Nal_WBC	NR
MI02218	Adult	Female	10-Aug-2011	0.00	0.11	Nal_WBC	RE
MI02239	Adult	Female	26-Aug-2011	0.00	0.10	Nal_WBC	NR
MI02248	Adult	Male	5-Sep-2011	0.00	0.11	Nal_WBC	NR
MI02248	Adult	Male	12-Jul-2012	0.13 ± 0.01	0.13	Nal_WBC	RE, Northern Is.
MI02252	Adult	Male	10-Sep-2011	0.00	0.10	Nal_WBC	NR
MI02253	Adult	Female	10-Sep-2011	0.00	0.10	Nal_WBC	NR
MI02254	Adult	Male	10-Sep-2011	0.00	0.10	Nal_WBC	NR
MI02322	Adult	Male	1-Oct-2011	0.00	0.10	Nal_WBC	NR
MI02322	Adult	Male	8-Mar-2012	0.00	0.11	Nal_WBC	NR
MI02322	Adult	Male	4-Dec-2012	0.00	0.10	Nal_WBC	NR
MI02323	Adult	Female	1-Oct-2011	0.00	0.10	Nal_WBC	NR
MI02334	Adult	Male	13-Oct-2011	0.00	0.11	Nal_WBC	NR
MI02365	Adult	Female	14-Dec-2011	0.00	0.11	Nal_WBC	NR
MI02493	Teenager	Female	16-Jan-2012	0.00	0.11	Nal_WBC	RE
MI02493	Teenager	Female	19-Apr-2012	0.00	0.05	Nal_WBC	RE

ID#	Age Type	Gender	Count Date	¹³⁷ Cs (kBq)		Method Code	Notes
				Value	MDA		
MI02493	Teenager	Female	10-May-2012	0.35 ± 0.02	0.14	Nal_WBC	RE, Northern Is.
MI02493	Teenager	Female	31-Jul-2012	0.10 ± 0.05	0.23	Nal_WBC	RE, Northern Is.
MI02494	Adult	Female	16-Jan-2012	0.00	0.10	Nal_WBC	NR
MI02494	Adult	Female	22-Aug-2012	0.00	0.10	Nal_WBC	NR
MI02766	Adult	Male	18-Jun-2012	0.00	0.11	Nal_WBC	NR
MI02780	Teenager	Female	31-Jul-2012	0.00	0.11	Nal_WBC	RE
MI02781	Teenager	Male	31-Jul-2012	0.00	0.10	Nal_WBC	NR
MI03018	Adult	Male	23-Oct-2012	0.00	0.10	Nal_WBC	NR
MI03080	Adult	Male	13-Dec-2012	0.00	0.11	Nal_WBC	NR

RE = Resident or visitor to Enewetak Atoll; NR = nonresident volunteer affiliated with the Enewetak population group; Northern Is. = volunteer known to have traveled to or worked on the northern islands of Enewetak Atoll during the measurement year; Rng = volunteer known to have worked or lived on Rongelap Atoll during the measurement year; Utr = volunteer known to have worked or lived on Utrök Atoll during the measurement year.

Table A2. Plutonium-239 urinalysis bioassay data (μBq per 24-void) developed for the Marshall Islands Program (2010-2012).

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration (μBq per 24 h void)		Method Code	Notes
				^{239}Pu	MDA		
EK03000	Adult	Female	2010-2012	0.08 \pm 0.08	0.2	CAMS/LLNL	EPG, Kona, HI
EK03001	Adult	Female	2010-2012	-0.01 \pm 0.07	0.2	CAMS/LLNL	EPG, Kona, HI
EK03002	Adult	Male	2010-2012	0.14 \pm 0.10	0.2	CAMS/LLNL	EPG, Kona, HI
EK03003	Adult	Female	2010-2012	0.44 \pm 0.12	0.2	CAMS/LLNL	EPG, Kona, HI
EK03004	Adult	Male	2010-2012	0.09 \pm 0.09	0.2	CAMS/LLNL	EPG, Kona, HI
EK03006	Adult	Male	2010-2012	0.07 \pm 0.09	0.2	CAMS/LLNL	EPG, Kona, HI
EK03007	Adult	Female	2010-2012	0.20 \pm 0.10	0.2	CAMS/LLNL	EPG, Kona, HI
EK03008	Adult	Male	2010-2012	0.11 \pm 0.16	0.5	CAMS/LLNL	EPG, Kona, HI
EK03009	Adult	Male	2010-2012	0.21 \pm 0.11	0.2	CAMS/LLNL	EPG, Kona, HI
EK03012	Adult	Female	2010-2012	0.07 \pm 0.09	0.2	CAMS/LLNL	EPG, Kona, HI
EK03013	Adult	Female	2010-2012	0.06 \pm 0.08	0.2	CAMS/LLNL	EPG, Kona, HI
EK03014	Adult	Female	2010-2012	0.04 \pm 0.16	0.5	CAMS/LLNL	EPG, Kona, HI
EK03015	Adult	Male	2010-2012	0.17 \pm 0.18	0.5	CAMS/LLNL	EPG, Kona, HI
EK03016	Adult	Female	2010-2012	-0.11 \pm 0.15	0.5	CAMS/LLNL	EPG, Kona, HI
EK03017	Adult	Male	2010-2012	-0.17 \pm 0.14	0.5	CAMS/LLNL	EPG, Kona, HI
EK03018	Adult	Male	2010-2012	-0.10 \pm 0.15	0.5	CAMS/LLNL	EPG, Kona, HI
EK03019	Adult	Male	2010-2012	-0.33 \pm 0.12	0.5	CAMS/LLNL	EPG, Kona, HI

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration (μ Bq per 24 h void)		Method Code	Notes
				²³⁹ Pu	MDA		
EK03020	Adult	Female	2010-2012	-0.04 \pm 0.15	0.5	CAMS/LLNL	EPG, Kona, HI
EK03021	Adult	Female	2010-2012	-0.27 \pm 0.13	0.5	CAMS/LLNL	EPG, Kona, HI
EN00002	Adult	Male	2010-2012	0.12 \pm 0.14	0.3	CAMS/LLNL	RE
EN00009	Adult	Male	2010-2012	0.83 \pm 0.26	0.4	CAMS/LLNL	RE
EN00010	Adult	Male	2010-2012	0.07 \pm 0.10	0.3	CAMS/LLNL	RE
EN00010	Adult	Male	2010-2012	0.48 \pm 0.24	0.4	CAMS/LLNL	RE
EN00024	Adult	Male	2010-2012	0.44 \pm 0.21	0.4	CAMS/LLNL	RE
EN00025	Adult	Male	2010-2012	0.35 \pm 0.12	0.2	CAMS/LLNL	EPG, Kona, HI
EN00030	Adult	Male	2010-2012	0.09 \pm 0.14	0.3	CAMS/LLNL	RE
EN00035	Adult	Male	2010-2012	0.03 \pm 0.13	0.3	CAMS/LLNL	RE
EN00044	Adult	Male	2010-2012	0.39 \pm 0.16	0.3	CAMS/LLNL	RE, Northern Is.
EN00044	Adult	Male	2010-2012	0.43 \pm 0.17	0.3	CAMS/LLNL	RE, Northern Is.
EN00048	Adult	Male	2010-2012	0.03 \pm 0.08	0.2	CAMS/LLNL	EPG, Kona, HI
EN00051	Adult	Male	2010-2012	0.23 \pm 0.19	0.4	CAMS/LLNL	RE, Northern Is.
EN00053	Adult	Male	2010-2012	0.21 \pm 0.17	0.5	CAMS/LLNL	EPG, Kona, HI
EN00057	Adult	Male	2010-2012	0.42 \pm 0.18	0.3	CAMS/LLNL	RE
EN00060	Adult	Male	2010-2012	0.42 \pm 0.17	0.3	CAMS/LLNL	RE

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration ($\mu\text{Bq}/24 \text{ h void}$)		Method Code	Notes
				^{239}Pu	MDA		
EN00069	Adult	Male	2010-2012	0.13 \pm 0.14	0.3	CAMS/LLNL	RE
EN00076	Adult	Male	2010-2012	0.26 \pm 0.14	0.3	CAMS/LLNL	RE
EN00084	Adult	Male	2010-2012	0.64 \pm 0.36	0.4	CAMS/LLNL	RE
EN00086	Adult	Male	2010-2012	0.56 \pm 0.16	0.3	CAMS/LLNL	RE, Northern Is.
EN00086	Adult	Male	2010-2012	0.47 \pm 0.18	0.3	CAMS/LLNL	RE, Northern Is.
EN00094	Adult	Male	2010-2012	0.43 \pm 0.16	0.3	CAMS/LLNL	RE, Northern Is.
EN00095	Adult	Male	2010-2012	0.09 \pm 0.15	0.3	CAMS/LLNL	RE
EN00095	Adult	Male	2010-2012	0.09 \pm 0.14	0.3	CAMS/LLNL	RE
EN00116	Adult	Male	2010-2012	0.72 \pm 0.24	0.4	CAMS/LLNL	RE
EN00131	Adult	Male	2010-2012	0.43 \pm 0.24	0.4	CAMS/LLNL	RE
EN00139	Adult	Male	2010-2012	0.05 \pm 0.13	0.3	CAMS/LLNL	RE, Northern Is.
EN00141	Adult	Male	2010-2012	0.58 \pm 0.25	0.3	CAMS/LLNL	RE, Northern Is.
EN00141	Adult	Male	2010-2012	0.77 \pm 0.29	0.4	CAMS/LLNL	RE, Northern Is.
EN00159	Adult	Male	2010-2012	0.19 \pm 0.15	0.4	CAMS/LLNL	RE
EN00161	Adult	Male	2010-2012	0.38 \pm 0.14	0.3	CAMS/LLNL	RE, Northern Is.
EN00180	Adult	Male	2010-2012	0.53 \pm 0.27	0.3	CAMS/LLNL	RE
EN00184	Adult	Male	2010-2012	0.91 \pm 0.28	0.3	CAMS/LLNL	RE, Northern Is., Inv

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration (μBq per 24 h void)		Method Code	Notes
				²³⁹ Pu	MDA		
EN00185	Adult	Male	2010-2012	0.11 ± 0.14	0.3	CAMS/LLNL	RE, Northern Is.
EN00199	Adult	Female	2010-2012	0.27 ± 0.19	0.4	CAMS/LLNL	RE
EN00201	Adult	Female	2010-2012	0.23 ± 0.15	0.3	CAMS/LLNL	RE
EN00222	Adult	Female	2010-2012	0.06 ± 0.10	0.3	CAMS/LLNL	RE
EN00226	Adult	Male	2010-2012	0.64 ± 0.28	0.4	CAMS/LLNL	RE
EN00226	Adult	Male	2010-2012	0.27 ± 0.16	0.4	CAMS/LLNL	RE
EN00237	Adult	Female	2010-2012	0.04 ± 0.13	0.3	CAMS/LLNL	RE
EN00238	Adult	Male	2010-2012	0.44 ± 0.24	0.4	CAMS/LLNL	RE
EN00258	Adult	Female	2010-2012	-0.002 ± 0.13	0.3	CAMS/LLNL	RE
EN00267	Adult	Female	2010-2012	0.54 ± 0.17	0.3	CAMS/LLNL	RE, Northern Is.
EN00267	Adult	Female	2010-2012	0.07 ± 0.14	0.3	CAMS/LLNL	RE, Northern Is.
EN00269	Adult	Female	2010-2012	0.43 ± 0.14	0.3	CAMS/LLNL	RE, Northern Is.
EN00303	Adult	Female	2010-2012	0.20 ± 0.15	0.4	CAMS/LLNL	RE
EN00312	Adult	Female	2010-2012	0.11 ± 0.12	0.3	CAMS/LLNL	RE
EN00317	Adult	Female	2010-2012	-0.05 ± 0.12	0.3	CAMS/LLNL	RE
EN00330	Adult	Female	2010-2012	0.55 ± 0.15	0.3	CAMS/LLNL	RE
EN00336	Adult	Female	2010-2012	-0.01 ± 0.16	0.5	CAMS/LLNL	EPG, Kona, HI

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration (μ Bq per 24 h void)		Method Code	Notes
				²³⁹ Pu	MDA		
EN00373	Adult	Female	2010-2012	-0.05 \pm 0.09	0.3	CAMS/LLNL	RE, Northern Is.
EN00373	Adult	Female	2010-2012	0.28 \pm 0.17	0.3	CAMS/LLNL	RE, Northern Is.
EN00379	Adult	Male	2010-2012	0.21 \pm 0.13	0.3	CAMS/LLNL	RE
EN00398	Adult	Male	2010-2012	0.58 \pm 0.29	0.3	CAMS/LLNL	RE
EN00399	Adult	Female	2010-2012	0.71 \pm 0.19	0.3	CAMS/LLNL	RE
EN00403	Adult	Male	2010-2012	0.46 \pm 0.16	0.3	CAMS/LLNL	RE, Northern Is.
EN00407	Adult	Female	2010-2012	0.43 \pm 0.13	0.2	CAMS/LLNL	EPG, Kona, HI
EN00408	Adult	Female	2010-2012	0.28 \pm 0.19	0.4	CAMS/LLNL	RE
EN00412	Adult	Male	2010-2012	0.46 \pm 0.17	0.3	CAMS/LLNL	RE
EN00415	Adult	Male	2010-2012	0.49 \pm 0.23	0.5	CAMS/LLNL	RE
EN00421	Adult	Female	2010-2012	1.09 \pm 0.25	0.5	CAMS/LLNL	EPG, RH, Inv
EN00422	Adult	Male	2010-2012	0.36 \pm 0.24	0.3	CAMS/LLNL	RE
EN00440	Adult	Female	2010-2012	0.46 \pm 0.20	0.4	CAMS/LLNL	RE
EN00467	Adult	Male	2010-2012	0.50 \pm 0.25	0.4	CAMS/LLNL	RE
EN00482	Adult	Male	2010-2012	0.19 \pm 0.15	0.3	CAMS/LLNL	RE
EN00517	Adult	Male	2010-2012	-0.16 \pm 0.09	0.3	CAMS/LLNL	RE
EN00517	Adult	Male	2010-2012	-0.08 \pm 0.12	0.3	CAMS/LLNL	RE

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration (μ Bq per 24 h void)		Method Code	Notes
				²³⁹ Pu	MDA		
EN00538	Adult	Female	2010-2012	0.21 \pm 0.13	0.3	CAMS/LLNL	RE
EN00540	Adult	Male	2010-2012	0.21 \pm 0.18	0.5	CAMS/LLNL	RE, Northern Is.
EN00540	Adult	Male	2010-2012	0.26 \pm 0.18	0.4	CAMS/LLNL	RE, Northern Is.
EN00543	Adult	Male	2010-2012	0.47 \pm 0.20	0.3	CAMS/LLNL	RE
EN00553	Adult	Male	2010-2012	0.35 \pm 0.12	0.2	CAMS/LLNL	EPG, Kona, HI
EN00554	Adult	Female	2010-2012	0.23 \pm 0.11	0.2	CAMS/LLNL	EPG, Kona, HI
EN00557	Adult	Female	2010-2012	0.22 \pm 0.11	0.2	CAMS/LLNL	EPG, Kona, HI
EN00577	Adult	Male	2010-2012	0.14 \pm 0.14	0.3	CAMS/LLNL	RE
EN00598	Teenager	Male	2010-2012	0.21 \pm 0.14	0.3	CAMS/LLNL	RE
EN00619	Teenager	Male	2010-2012	0.12 \pm 0.15	0.3	CAMS/LLNL	RE
EN00708	Adult	Male	2010-2012	-0.16 \pm 0.09	0.3	CAMS/LLNL	RE, Northern Is.
EN00732	Adult	Female	2010-2012	0.05 \pm 0.11	0.4	CAMS/LLNL	RE
EN00735	Adult	Male	2010-2012	0.11 \pm 0.12	0.3	CAMS/LLNL	RE
EN00735	Adult	Male	2010-2012	0.31 \pm 0.20	0.4	CAMS/LLNL	RE
EN00735	Adult	Male	2010-2012	0.25 \pm 0.17	0.3	CAMS/LLNL	RE
EN00795	Adult	Male	2010-2012	0.57 \pm 0.24	0.4	CAMS/LLNL	RE
EN00807	Adult	Male	2010-2012	0.02 \pm 0.10	0.3	CAMS/LLNL	RE

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration (μ Bq per 24 h void)		Method Code	Notes
				²³⁹ Pu	MDA		
EN00838	Adult	Male	2010-2012	0.82 \pm 0.29	0.4	CAMS/LLNL	RE
EN00850	Adult	Male	2010-2012	0.39 \pm 0.22	0.3	CAMS/LLNL	RE
EN00850	Adult	Male	2010-2012	0.27 \pm 0.17	0.4	CAMS/LLNL	RE
EN00883	Adult	Male	2010-2012	0.10 \pm 0.16	0.3	CAMS/LLNL	RE
EN00884	Adult	Male	2010-2012	0.37 \pm 0.14	0.3	CAMS/LLNL	RE
EN00885	Adult	Male	2010-2012	0.70 \pm 0.28	0.4	CAMS/LLNL	RE
EN00887	Adult	Male	2010-2012	0.13 \pm 0.18	0.3	CAMS/LLNL	RE, Northern Is.
EN00904	Adult	Female	2010-2012	0.66 \pm 0.18	0.3	CAMS/LLNL	RE
EN00906	Adult	Male	2010-2012	0.57 \pm 0.26	0.4	CAMS/LLNL	RE
EN00909	Adult	Female	2010-2012	0.16 \pm 0.09	0.2	CAMS/LLNL	RE
EN00927	Adult	Male	2010-2012	0.07 \pm 0.10	0.3	CAMS/LLNL	RE, Northern Is.
EN00938	Adult	Male	2010-2012	0.28 \pm 0.21	0.3	CAMS/LLNL	RE
EN01066	Adult	Male	2010-2012	0.98 \pm 0.32	0.5	CAMS/LLNL	RE, Inv
EN01080	Adult	Male	2010-2012	0.10 \pm 0.11	0.3	CAMS/LLNL	RE, Northern Is.
EN01113	Adult	Male	2010-2012	0.05 \pm 0.14	0.3	CAMS/LLNL	RE, Northern Is.
MI00093	Adult	Female	2010-2012	-0.06 \pm 0.10	0.3	CAMS/LLNL	UPG, NR
MI00103	Adult	Male	2010-2012	0.25 \pm 0.12	0.3	CAMS/LLNL	GP
MI001081	Adult	Female	2010-2012	0.19 \pm 0.19	0.9	CAMS/LLNL	RPG, NR, CHS

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration (μ Bq per 24 h void)		Method Code	Notes
				²³⁹ Pu	MDA		
MI00275	Adult	Female	2010-2012	0.35 \pm 0.14	0.3	CAMS/LLNL	RPG, NR
MI00277	Adult	Female	2010-2012	0.90 \pm 0.18	0.3	CAMS/LLNL	RPG, NR, CHS
MI00279	Adult	Female	2010-2012	0.16 \pm 0.19	0.9	CAMS/LLNL	RPG, NR
MI00280	Adult	Female	2010-2012	0.16 \pm 0.16	0.5	CAMS/LLNL	RPG, NR, CHS
MI00280	Adult	Female	2010-2012	0.66 \pm 0.22	0.9	CAMS/LLNL	RPG, NR, CHS
MI00280	Adult	Female	2010-2012	0.52 \pm 0.17	0.3	CAMS/LLNL	RPG, NR, CHS
MI00280	Adult	Female	2010-2012	0.03 \pm 0.12	0.3	CAMS/LLNL	RPG, NR, CHS
MI00285	Adult	Male	2010-2012	0.90 \pm 0.23	0.9	CAMS/LLNL	RPG, NR, CHS, Inv
MI00285	Adult	Male	2010-2012	0.28 \pm 0.15	0.3	CAMS/LLNL	RPG, NR, CHS
MI00285	Adult	Male	2010-2012	0.27 \pm 0.15	0.3	CAMS/LLNL	RPG, NR, CHS
MI00289	Adult	Male	2010-2012	0.90 \pm 0.24	0.9	CAMS/LLNL	RPG, NR, CHS, Inv
MI00289	Adult	Male	2010-2012	0.29 \pm 0.15	0.3	CAMS/LLNL	RPG, NR
MI00290	Adult	Male	2010-2012	2.29 \pm 0.33	0.9	CAMS/LLNL	RPG, NR, CHS, Inv
MI00290	Adult	Male	2010-2012	0.25 \pm 0.14	0.3	CAMS/LLNL	RPG, NR, CHS
MI00296	Adult	Female	2010-2012	0.27 \pm 0.18	0.5	CAMS/LLNL	RPG, NR, CHS
MI00296	Adult	Female	2010-2012	0.29 \pm 0.11	0.3	CAMS/LLNL	RPG, NR, CHS
MI00297	Adult	Female	2010-2012	0.20 \pm 0.14	0.3	CAMS/LLNL	RPG, NR, CHS

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration (μ Bq per 24 h void)		Method Code	Notes
				²³⁹ Pu	MDA		
MI00299	Adult	Female	2010-2012	0.84 \pm 0.21	0.3	CAMS/LLNL	GP
MI00301	Adult	Female	2010-2012	0.56 \pm 0.22	0.5	CAMS/LLNL	RU
MI00302	Adult	Female	2010-2012	1.75 \pm 0.30	0.9	CAMS/LLNL	UPG, NR, CHS, Inv
MI00302	Adult	Female	2010-2012	0.25 \pm 0.16	0.3	CAMS/LLNL	RPG, NR, CHS
MI00493	Adult	Female	2010-2012	0.52 \pm 0.22	0.9	CAMS/LLNL	RPG, NR, CHS
MI00493	Adult	Female	2010-2012	0.20 \pm 0.13	0.3	CAMS/LLNL	RPG, NR, CHS
MI00496	Adult	Male	2010-2012	0.20 \pm 0.16	0.5	CAMS/LLNL	RPG, NR, CHS
MI00826	Adult	Female	2010-2012	0.17 \pm 0.18	0.9	CAMS/LLNL	RPG, NR, CHS
MI00865	Adult	Male	2010-2012	0.06 \pm 0.12	0.3	CAMS/LLNL	RE
MI00938	Adult	Female	2010-2012	0.71 \pm 0.23	0.9	CAMS/LLNL	RPG, NR, CHS
MI00938	Adult	Female	2010-2012	0.42 \pm 0.17	0.3	CAMS/LLNL	RPG, NR, CHS
MI00940	Adult	Male	2010-2012	-0.08 \pm 0.12	0.5	CAMS/LLNL	RPG, NR, CHS
MI00940	Adult	Male	2010-2012	0.89 \pm 0.24	0.9	CAMS/LLNL	RPG, NR, CHS
MI00940	Adult	Male	2010-2012	0.52 \pm 0.19	0.3	CAMS/LLNL	RPG, NR, CHS
MI00940	Adult	Male	2010-2012	0.67 \pm 0.19	0.3	CAMS/LLNL	RPG, NR, CHS
MI00945	Adult	Female	2010-2012	0.13 \pm 0.15	0.5	CAMS/LLNL	RPG, NR, CHS
MI00945	Adult	Female	2010-2012	0.35 \pm 0.19	0.9	CAMS/LLNL	RPG, NR, CHS

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration (μ Bq per 24 h void)		Method Code	Notes
				²³⁹ Pu	MDA		
MI01022	Adult	Male	2010-2012	0.07 \pm 0.12	0.3	CAMS/LLNL	RE, Northern Is.
MI01073	Adult	Female	2010-2012	0.32 \pm 0.18	0.5	CAMS/LLNL	RPG, NR, CHS
MI01073	Adult	Female	2010-2012	0.26 \pm 0.14	0.3	CAMS/LLNL	RPG, NR, CHS
MI01114	Adult	Female	2010-2012	-0.06 \pm 0.12	0.5	CAMS/LLNL	UPG, NR
MI01160	Adult	Male	2010-2012	0.99 \pm 0.29	0.5	CAMS/LLNL	RPG, NR, CHS, Inv
MI01160	Adult	Male	2010-2012	1.33 \pm 0.28	0.9	CAMS/LLNL	RPG, NR, CHS, Inv
MI01161	Adult	Female	2010-2012	0.03 \pm 0.15	0.5	CAMS/LLNL	RPG, NR, CHS
MI01161	Adult	Female	2010-2012	-0.05 \pm 0.16	0.9	CAMS/LLNL	RPG, NR, CHS
MI01185	Adult	Female	2010-2012	0.03 \pm 0.12	0.3	CAMS/LLNL	RPG, NR
MI01190	Adult	Female	2010-2012	0.97 \pm 0.22	0.3	CAMS/LLNL	GP, Inv
MI01193	Adult	Female	2010-2012	0.32 \pm 0.17	0.5	CAMS/LLNL	RPG, NR, CHS
MI01193	Adult	Female	2010-2012	-0.12 \pm 0.09	0.3	CAMS/LLNL	RPG, NR, CHS
MI01194	Adult	Male	2010-2012	0.50 \pm 0.21	0.5	CAMS/LLNL	RPG, NR
MI01194	Adult	Male	2010-2012	0.20 \pm 0.13	0.3	CAMS/LLNL	RPG, NR
MI01215	Adult	Female	2010-2012	0.69 \pm 0.25	0.9	CAMS/LLNL	RPG, NR, CHS
MI01215	Adult	Female	2010-2012	0.52 \pm 0.18	0.3	CAMS/LLNL	RPG, NR, CHS
MI01217	Adult	Female	2010-2012	8.52 \pm 0.57	0.9	CAMS/LLNL	RPG, NR, CHS, O, Inv

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration (μ Bq per 24 h void)		Method Code	Notes
				²³⁹ Pu	MDA		
MI01217	Adult	Female	2010-2012	0.13 \pm 0.13	0.3	CAMS/LLNL	RPG, NR, CHS
MI01238	Adult	Female	2010-2012	0.06 \pm 0.15	0.5	CAMS/LLNL	RPG, NR
MI01529	Adult	Female	2010-2012	1.07 \pm 0.28	0.5	CAMS/LLNL	GP, Inv
MI01529	Adult	Female	2010-2012	0.18 \pm 0.12	0.3	CAMS/LLNL	GP
MI01608	Adult	Male	2010-2012	1.42 \pm 0.21	0.3	CAMS/LLNL	RPG, NR, CHS, Inv
MI01620	Adult	Female	2010-2012	-0.04 \pm 0.13	0.5	CAMS/LLNL	GP
MI01620	Adult	Female	2010-2012	-0.06 \pm 0.09	0.3	CAMS/LLNL	GP
MI01620	Adult	Female	2010-2012	-0.09 \pm 0.09	0.3	CAMS/LLNL	GP
MI01732	Adult	Male	2010-2012	0.95 \pm 0.24	0.9	CAMS/LLNL	RPG, NR, CHS, Inv
MI01751	Adult	Female	2010-2012	0.30 \pm 0.20	0.9	CAMS/LLNL	RPG, NR
MI01751	Adult	Female	2010-2012	0.36 \pm 0.13	0.3	CAMS/LLNL	RPG, NR
MI01754	Adult	Male	2010-2012	0.50 \pm 0.14	0.3	CAMS/LLNL	RPG, NR, CHS
MI01754	Adult	Male	2010-2012	0.12 \pm 0.13	0.3	CAMS/LLNL	RPG, NR, CHS
MI01764	Adult	Female	2010-2012	0.49 \pm 0.17	0.3	CAMS/LLNL	GP
MI01796	Adult	Female	2010-2012	0.36 \pm 0.16	0.3	CAMS/LLNL	GP
MI01995	Adult	Male	2010-2012	0.39 \pm 0.20	0.9	CAMS/LLNL	RPG, NR
MI01995	Adult	Male	2010-2012	0.02 \pm 0.09	0.3	CAMS/LLNL	RPG, NR

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration (μ Bq per 24 h void)		Method Code	Notes
				²³⁹ Pu	MDA		
MI02079	Adult	Female	2010-2012	-0.15 \pm 0.08	0.3	CAMS/LLNL	RPG, NR
MI02114	Adult	Female	2010-2012	0.22 \pm 0.15	0.3	CAMS/LLNL	RPG, NR
MI02116	Adult	Male	2010-2012	0.27 \pm 0.15	0.3	CAMS/LLNL	GP
MI02137	Adult	Female	2010-2012	0.10 \pm 0.13	0.3	CAMS/LLNL	GP
MI02677	Adult	Male	2010-2012	0.10 \pm 0.12	0.3	CAMS/LLNL	GP
MI02799	Adult	Female	2010-2012	-0.12 \pm 0.08	0.3	CAMS/LLNL	GP
MI02914	Adult	Female	2010-2012	-0.09 \pm 0.09	0.3	CAMS/LLNL	RPG, NR
MI02915	Adult	Male	2010-2012	0.11 \pm 0.13	0.3	CAMS/LLNL	RPG, NR
MI02921	Adult	Male	2010-2012	-0.10 \pm 0.09	0.3	CAMS/LLNL	RPG, NR, CHS
MI02922	Adult	Female	2010-2012	-0.10 \pm 0.09	0.3	CAMS/LLNL	RPG, NR
MI02931	Adult	Male	2010-2012	0.30 \pm 0.16	0.3	CAMS/LLNL	RPG, NR
RR00087	Adult	Male	2010-2012	0.38 \pm 0.16	0.3	CAMS/LLNL	RPG, NR
RR00240	Adult	Male	2010-2012	0.00 \pm 0.11	0.3	CAMS/LLNL	RPG, NR
UT00015	Adult	Female	2010-2012	-0.09 \pm 0.09	0.3	CAMS/LLNL	UPG, NR
UT00015	Adult	Female	2010-2012	-0.06 \pm 0.17	0.9	CAMS/LLNL	UPG, NR
UT00015	Adult	Female	2010-2012	-0.09 \pm 0.10	0.3	CAMS/LLNL	UPG, NR
UT00015	Adult	Female	2010-2012	0.12 \pm 0.13	0.3	CAMS/LLNL	UPG, NR

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration ($\mu\text{Bq}/24 \text{ h void}$)		Method Code	Notes
				^{239}Pu	MDA		
UT00056	Adult	Female	2010-2012	0.01 \pm 0.11	0.3	CAMS/LLNL	UPG, NR, CHS
UT00058	Adult	Male	2010-2012	0.15 \pm 0.13	0.3	CAMS/LLNL	RU
UT00060	Adult	Male	2010-2012	0.04 \pm 0.12	0.3	CAMS/LLNL	RU
UT00062	Adult	Male	2010-2012	0.15 \pm 0.15	0.3	CAMS/LLNL	RU, CHS
UT00065	Adult	Female	2010-2012	0.25 \pm 0.15	0.3	CAMS/LLNL	RU
UT00066	Adult	Female	2010-2012	-0.03 \pm 0.11	0.3	CAMS/LLNL	RU, CHS
UT00076	Adult	Female	2010-2012	0.27 \pm 0.13	0.3	CAMS/LLNL	RU
UT00103	Adult	Female	2010-2012	0.24 \pm 0.12	0.3	CAMS/LLNL	UPG, NR, CHS
UT00105	Adult	Male	2010-2012	1.52 \pm 0.31	0.3	CAMS/LLNL	UPG, NR, CHS, Inv
UT00107	Adult	Female	2010-2012	0.44 \pm 0.17	0.3	CAMS/LLNL	UPG, NR
UT00113	Adult	Male	2010-2012	0.29 \pm 0.13	0.3	CAMS/LLNL	UPG, NR, CHS
UT00113	Adult	Male	2010-2012	0.46 \pm 0.17	0.3	CAMS/LLNL	UPG, NR, CHS
UT00114	Adult	Male	2010-2012	0.43 \pm 0.13	0.3	CAMS/LLNL	RU
UT00207	Adult	Female	2010-2012	0.28 \pm 0.14	0.3	CAMS/LLNL	RU
UT00284	Adult	Female	2010-2012	-0.09 \pm 0.09	0.3	CAMS/LLNL	UPG, NR, CHS
UT00488	Adult	Female	2010-2012	0.04 \pm 0.11	0.3	CAMS/LLNL	RU
Field Blank	-	-	2010-2012	-0.05 \pm 0.13	0.5	CAMS/LLNL	

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration (μ Bq per 24 h void)		Method Code	Notes
				²³⁹ Pu	MDA		
Field Blank	-	-	2010-2012	0.06 \pm 0.14	0.5	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.14 \pm 0.11	0.5	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.34 \pm 0.14	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.09 \pm 0.10	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.24 \pm 0.12	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.09 \pm 0.10	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.03 \pm 0.09	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.04 \pm 0.10	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.08 \pm 0.10	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.25 \pm 0.17	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.16 \pm 0.17	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.01 \pm 0.12	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.08 \pm 0.13	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.14 \pm 0.13	0.4	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.07 \pm 0.11	0.4	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.02 \pm 0.12	0.4	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.36 \pm 0.21	0.4	CAMS/LLNL	

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration (μ Bq per 24 h void)		Method Code	Notes
				²³⁹ Pu	MDA		
Field Blank	-	-	2010-2012	0.14 \pm 0.13	0.4	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.06 \pm 0.15	0.4	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.07 \pm 0.11	0.4	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.13 \pm 0.14	0.4	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.22 \pm 0.19	0.9	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.31 \pm 0.19	0.9	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.33 \pm 0.20	0.9	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.04 \pm 0.17	0.9	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.15 \pm 0.18	0.9	CAMS/LLNL	
Field Blank	-	-	2010-2012	2.65 \pm 0.33	0.9	CAMS/LLNL	O
Field Blank	-	-	2010-2012	0.13 \pm 0.18	0.9	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.11 \pm 0.16	0.9	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.13 \pm 0.15	0.9	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.08 \pm 0.08	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.20 \pm 0.13	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.10 \pm 0.08	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.13 \pm 0.08	0.3	CAMS/LLNL	

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration (μ Bq per 24 h void)		Method Code	Notes
				²³⁹ Pu	MDA		
Field Blank	-	-	2010-2012	-0.12 \pm 0.09	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.08 \pm 0.13	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.08 \pm 0.10	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.06 \pm 0.14	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.62 \pm 0.18	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.09 \pm 0.13	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.13 \pm 0.13	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.19 \pm 0.09	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.00 \pm 0.13	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.00 \pm 0.12	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.06 \pm 0.10	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.11 \pm 0.09	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.13 \pm 0.09	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.06 \pm 0.10	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.08 \pm 0.09	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.03 \pm 0.11	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.10 \pm 0.09	0.3	CAMS/LLNL	

ID#	Age Type	Gender	Collection Date	Radionuclide Concentration (μBq per 24 h void)		Method Code	Notes
				^{239}Pu	MDA		
Field Blank	-	-	2010-2012	-0.19 \pm 0.07	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.13 \pm 0.08	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.18 \pm 0.07	0.3	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.03 \pm 0.07	0.2	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.15 \pm 0.10	0.2	CAMS/LLNL	
Field Blank	-	-	2010-2012	0.20 \pm 0.11	0.2	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.05 \pm 0.14	0.5	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.12 \pm 0.15	0.5	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.05 \pm 0.15	0.5	CAMS/LLNL	
Field Blank	-	-	2010-2012	-0.24 \pm 0.13	0.5	CAMS/LLNL	

EPG = Enewetak-Ujelang Population Group; RPG = Rongelap Population Group; UPG = Utrök Population Group; ER = Enewetak Atoll Resident; UR= Utrök Atoll Resident; NR = Nonresident; GP = General Marshallese Population.

CHS = Comprehensive Health Services/DOE patient.

Northern Is. = Individual who has worked or lived on the northern islands of Enewetak (several weeks to months).

Field Blank = Procedural Field Blanks were collected in the Marshall Islands and handled in exactly the same manner as bioassay samples. The results provide a measure of the background concentration of plutonium introduced as part of sample handling and analysis procedures.

O = Outlier, not included in subsequent analysis; Inv = Data under investigation with initial request to resample.

Note 1. Data acquired for bioassay sample UT00104 collected 9-Sep-2011 with a measured ^{239}Pu content of 1097 μBq was rejected after an initial outlier QA investigation showed the sample was contaminated, i.e., secondary analysis by MCICP-MS of residual AMS cathode material revealed the sample contained an unusually high $^{240}\text{Pu}/^{239}\text{Pu}$ mass ratio not normally attributed to environmental contamination from weapons fallout.

Lawrence Livermore National Laboratory
Technical Information Department
Livermore, CA 94551

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